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ABSTRACT

This publication consists of seven papers on educational reform in China chosen mainly from major Chinese journals of education science. "The Decision on Reforming the Educational System Made by the Central Committee of the Communist Party of China," published in May 1985, is a particularly important document concerning the Chinese educational reform. Accordingly, the first article by He Dong-chang, the Vice-Chairman of the State Education Commission, highlights the major purpose of this document and analyzes the reasons why China has to restructure education. "Current Educational Reform and Research in China" by Wu Wei, focuses on seven major problems of educational reform in China at present and enumerates the major accomplishments of Chinese educational research. "On Educational Reforms in China," by Liu Yi-Fan, probes several important theoretical issues of educational reform and social development since the founding of the People's Republic of China. Professor Liu Fonian provides recommendations to "Improve the Teaching Quality in the Popularization of Compulsory Education." "Primary and Secondary Education in Rural Areas," by Xu Lin, analyzes the new problems brought about by the growth of towns in rural areas. In his "The Overall Structure of School Activities," Jiang Shanye argues for the critical importance of school activities, stressing their relationship to students' mental and physical development. Finally, Cao Qingyan summarizes the "Achievements of the People's Education in China," citing the lessons China has drawn from its educational practice in the past years. (TE)

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Educational Reform and Development in China

Wu Wei, compiler
Edited and translated by
Chen Shu-Ching, Shu Hang-li
and Wu Yen-bo

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Special Studies in Comparative Education

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EDUCATIONAL REFORM AND DEVELOPMENT IN CHINA

Wu Wei, Compiler
Edited and translated by Chen Shu-ching, Shu Hang-li
and Wu Yen-bo
(and with the assistance of Jing Wang)

Special Studies in Comparative Education
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FOREWORD

We are pleased to present the 19th in the Comparative Education Center's series of Special Studies Publications. This publication focuses on contemporary educational developments in one of the world's most important countries, the People's Republic of China. The articles collected here reflect current thinking by Chinese educational researchers. The articles have been selected by Mr. Wu Wei of the Central Institute of Educational Research in Beijing. The translations were done by Chen Shu-Ching and Shu Hang-li of the Comparative Education Center and they were edited by Jing Wang and P. G. Altbach, also of the Center. The material was typed by Carol Norris of the Department of Educational Organization, Administration and Policy, State University of New York at Buffalo.

This publication is a cooperative venture of the Comparative Education Center and the Central Institute of Educational Research in Beijing. It is one of the first joint publications between two centers of educational research and analysis. It is a symbol of the growing cooperation between educational researchers on both sides of the Pacific Ocean. This publication is dedicated to the continuation of a fruitful collaborative relationship.

Philip G. Altbach
Director

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Preface

It is my honor to introduce several articles dealing with the current educational reforms and developments in China. These articles discuss, from various angles, some problems that China is faced with in its educational progress, and how these problems can be solved. I hope that readers will get some understanding of the situation, major goals and prospects of the current educational reform in China. If readers are interested in these topics, we will be glad to further introduce some materials concerned, so that information will be exchanged and friendship can be strengthened between the educators of China and those in other countries.

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Introduction

Chen Shu-ching and Shu Hangli

Along with the development of economic reform which began in the early 1980's as an important result of the Third Plenary session of the Twelfth Central Committee of the Communist Party of China, China has launched its educational reform in recent years. "The Decision on Reforming the Educational System Made by the CCCPC" in May, 1985, pushed this reform to the climax. Theoreticians, practitioners and administrators in education circles have approached the educational reform from different angles. As a result of this development, a large number of articles on this hot topic have been published in the journals of education in China.

It is true that the educational sector in China has experienced several reforms since 1949; however, the current one can be said to be the most profound not only because of its unprecedented scope and depth but also because this reform took place as a consequence of the reform in China's economic system, a first attempt by the government since 1949 when China took the socialist road.

It is probably fair to say that in recent years different viewpoints have been allowed expression. Consequently, academic studies and contentions can now be conducted in a more democratic and lively atmosphere. One evidence of such a development is that drawbacks of the existing economic as well as educational systems can be discussed and criticized openly, and the other evidence is that more objective and scientific analyses and evaluations of the previous educational reforms are being carried out. This is something which was impossible to do before, but has become a common sight in the sphere of learning in recent years. The great efforts and progress made by our Chinese colleagues are well received and rewarding.

The papers printed in this publication are chosen mainly from the major journals of education science in China; and their authors are influential figures in China's educational sector. They are representative of the latest trends in studies on the topic of the Chinese educational reform. It is our hope that the collection of the papers printed here will be conducive to our readers' objective understanding of the realities, achievements and problems of China's current educational reform.

"The Decision on Reforming the Educational System Made by the Central Committee of the Communist Party of China" published in May, 1985, is a particularly important document concerning the reform in the educational system in China. The article, "The Program of Reform of the Educational System of China," by He Dong-chang, the Vice-Chairman of the State Education Commission, comments on how the document was drafted and other related issues from the perspective of a high ranking official of the Chinese government. This article highlights the major purpose of the document and analyzes the reasons why China has to start with

restructuring to reform education. Special attention is paid, in the article, to the major guidelines and the important strategic decisions of the document. Therefore, we have very reason to believe that it is the authoritarian interpretation of "The Decision on Reforming the Educational System Made by CCCPC."

The first part of Wu Wei's article, "Current Educational Reform and Research in China," deals in a specific way with seven issues that reveal the major problems of educational reform in China at the present time. Facing up to the problems and difficulties that China's educational sector has come across in the process of the economic reform, the author sums up preliminarily the major experiences in educational reform in recent years. The article, paying special attention to reforming educational goals, points out that "(to reform education), a fundamental step is to have a clear understanding of the educational policy and purpose of school education in the new era." In this article, the critical importance of implementing the educational principle of developing in an all-round way--morally, intellectually, physically and aesthetically--is particularly stressed. The second part of the article gives an explanation of China's research on education science. The major accomplishments of the country's research on education science is enumerated. On the basis of China's experiences in the past several decades, the author believes that to engage in research on education science, four relationships should be correctly understood and dealt with; they are: the relationship between theory and practice, the relationship between macro research and micro research, the relationship between popularization and the raising of standards, and the relationship between criticism and inheritance.

Liu Yi-fan's article, "On Educational Reforms in China," probes into several important theoretical issues on educational reforms since the founding of the People's Republic of China. The author emphasizes that educational reforms must suit and serve social development. In assessing the suitability between the educational reforms and the needs of social development, he suggests that the previous educational reforms in China fall into three categories: (a) those which were carried out in accordance with the needs of social development and consequently pushed the society forward successfully; (b) those which were carried out against the needs of social development and consequently hindered the social development and sabotaged the educational cause; and (c) those which were strongly influenced by the changes in the society. The author includes the current educational reform in the first category. While dealing with the relationship between inheritance and reform, he points out that the experiences accumulated by the predecessors have always been inherited and passed down the generations. However, inheritance should not be uncritical. Moreover, the relationships between learning and creation, and between incremental change and revolutionary change are considered. In a sense, this essay gives a systematic summary of the experiences in educational reforms since the establishment of the New China in 1949.

According to "The Decision on Reforming the Educational System Made by the Central Committee of the Communist Party of China," the nine-year compulsory education scheme is taking off in China. In his article, "Improve the Teaching Quality in the Popularization of Compulsory education," Professor Liu Fo-nian of the East China Normal University, suggests that two efforts should be made to implement this ambitious program: one is to increase the quantity and the other is to improve the quality of education. Among many conditions which are required to improve the quality, he stresses that teacher quality is the most important. How to improve the quality of teaching given the existing teacher cadre, facilities and teaching materials? Professor Liu believes that teacher's educational ideology should be changed and they should get rid of the prejudice that most students in key schools are excellent, while only a few students in ordinary schools are able and most of them are about average or even mediocre. He particularly stresses that if a teacher is willing to try hard to improve his or her teaching methods, he or she can gradually make most students achieve good results. Therefore, having a good ideology is very important since it has a great impact on the morale of both teachers and students. To turn such an ideology into reality, he maintains that teachers should work hard on every link in the chain of the teaching process, from forming clear goals in teaching to improving their teaching methods. Several teaching methods which might be tried out in ordinary primary and secondary schools are introduced.

Along with the development of the reform in the economic system, China's towns have grown fast in recent years. Now, China has over 3,500 towns and more than 53,000 market towns. The growth of towns has not only played an important role in promoting economic development in the vast rural areas, but has also given impetus to the rapid expansion of the educational undertakings there. What impact does the growth of towns have on the primary and secondary education in the rural areas? What favorable conditions has it created? What new contradictions and problems has it brought about? How should primary and secondary education be reformed so that the needs of the economic development in the new situation can be satisfied? In his article, "Primary and Secondary Education in Rural Areas," Xu Lin, through investigations in the rural areas in Jiangsu, which is one of the more developed provinces economically and culturally in China, puts forward his own viewpoints on these questions. The author analyzes the new contradictions and problems which have been brought about by the growth of towns, namely (a) "surplus of the source of pupils," in primary and secondary schools in towns; (b) the unsuitability of the knowledge structure of junior and senior high school graduates to the changes in the industrial structure of towns; and (c) the unwillingness of the secondary school graduates in the rural areas to return to farm work in their home villages. According to the author, to solve these contradictions and problems, major efforts should be made to reform rural primary and secondary education. Some suggestions on how to implement the reform are also proposed.

In China, for a long time, emphasis of education has been put on developing individuals in an all-round way--morally, intellectually, and physically. However, the full implementation of this policy falls far short of what should have been accomplished. Why? In his article, "The Overall Structure of School Activities," Jiang Shanye argues that the major reason for this defect is the inadequate understanding of the critical importance of school activities. He makes a systematic exposition of the position and role of school activities, stressing that they are closely related to the tasks and goals of school education and to the regular patterns of and demands for the students' mental and physical development. He believes that school education without various activities is not in line with the educational goals and the objective law of the mental and physical development of students. To counter the tendency towards overemphasis on classroom--teaching without various activities in quite a few schools, he points out that "it would be an incomplete, one-sided education by which the educational tasks and goals could never be realized." He agrees that classroom-teaching is the major school activity which takes up the most part of the school education. However, he emphasizes that to develop students in an all-around way, the other seven activities are also important in the overall structure of school activities. Since quite a few schools have neglected nearly all activities but classroom-teaching, the major viewpoints put forward by the author are worth noticing.

It is recognized that since its founding, the New China has achieved in its education remarkable successes that are not comparable to any stages in China's history, even though it has also learned lessons from the failures in certain aspects during certain periods. The article by Cao Qingyang, using sufficient data and fact, affirms the major achievements of the educational sector since 1949. The author, taking the wealth of long-time educational experiences as another important achievement, also sums up the major lessons China has drawn from its educational practice in the past years.

The Program of Reform of the Educational System of China*

by He Dong-chang

"The Decision on Reforming the Educational System Made by the Central Committee of the Communist Party of China" is a document concerning the reform of the educational system of China. Here, I'd make some comments on the how the document was drafted and other related issues.

(1) The process of drafting the document.

"The Decision on Reforming the Economic System Made by the Central Committee of the Communist Party" which was adopted by the Third Plenary Session of the Twelfth Central Committee points out: "Along with the reform of the economic system, reforming both the scientific and technological system and the educational system is becoming a more and more urgent strategic task. The Central Committee will concentrate on discussing the problems and make relevant decisions." Since October, 1984, the Central Committee had given high priority to the reform of the educational system on its agenda according to the spirit of this decision. As a result, the leading group was established for drafting documents for reforming the scientific and technoloigcal system and the educational system.

After the second draft of the document, some members of the Research Division of the Secretariat of the CCCCP who had been involved in drafting the "The Decision on Reforming the Economic System" were invited twice to make major revisions resulting in the fifth draft of the document, which was soon distributed down to provinces, autonomous regions, municipalities, the central agencies, democratic parties, and other people's organizations for their opinions.

In mid-April, 1985, members of the Research Division of the Secretariat of the CCCCP and the Ministry of Education revised the fifth draft of the document on the suggestions put forward by all parts of the country, various government departments and different quarters, thus the eighth draft was completed. On May 3, 1985, the Secretariat of the CCCCP discussed it and then, the ninth draft was written in accordance with the spirit of the discussion. On May 13, the Secretariat discussed the ninth draft sentence by sentence, and word by word, and eventually adopted it in principle. Soon afterwards, some further revisions were made, thus the tenth draft was completed, which was submitted to the National Conference of Education for discussion. The final revisions were made on the suggestions put forward at this conference. Consequently, the eleventh draft came into being. On May 27, the Political Bureau discussed the draft of the document and approved its publication.

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*This is the text of a speech delivered by He Dong-chang, Vice-Chairman of the State Education Commission, at the National Conference of Education in May 1985. Slightly abridged by the translator.

While the document was being drafted, a number of symposia were held in order to solicit opinions from those responsible for education in the central authorities, some provinces, autonomous regions and municipalities, and from some administrators of universities and colleges, experts and people from the democratic parties. At the Third Session of the Sixth National People's Congress, suggestions were also sought from the members of its standing committee, some deputies and some members of the Chinese People's Political Consultative Conference. In addition, nine Chinese-American scholars were invited to be present at a forum and were asked for comments on the document. A rough statistic shows that people who have participated in discussing the document totalled over ten thousand. The document is really a crystallization of collective wisdom.

(2) The major purpose of the document is to restructure education.

Since the founding of New China, our educational undertaking has greatly contributed to supplying the state with specialized personnel and to raising the standard of culture and science of the Chinese nation. In the years before the "Cultural Revolution," we accomplished remarkable achievements in education. However, we should note that since the late 1950s, the educational system was constantly disrupted by "Leftist" political movements. From the mid-1960s to the mid-1970s, economy, science and technology, and education were developing dramatically in the developed countries of the world, while our educational cause was seriously damaged by the "Cultural Revolution" for as long as ten years. Thus, the educational gap between China and the developed countries which had been narrowed in many fields, widened again. The backwardness of our education and the defects in the educational structure have become all the more obvious in face of current developments resulting from our policy of opening up to the outside world, invigorating the domestic economy and carrying out a comprehensive restructuring of the economy. Therefore, from now on, education should be reformed step by step.

Why must we start with restructuring to reform education? Because:

(A) The development of restructuring economy is bound to exert an impact on the educational system. For instance, restructuring the economy in the rural areas which started earlier has led to demands for talent, and, thus, to reforms in the educational system there. The all-round restructuring of the economy with the emphasis on cities has been exerting an even more profound impact on the educational system. Reforms in education should adapt to restructuring the economy.

(B) We are faced with some problems concerning the development of education, which should be solved as soon as possible. They are, generally speaking, backwardness of primary education which impairs the quality of the Chinese nation, the quality of workers and the quality of

education in all types of schools at all levels; too small a proportion of vocational and technical education in the whole structure of secondary education and its slow development; inappropriate structure and unbalanced composition of disciplines in higher education. Due to the defects of the administrative system, the whole educational undertaking lacks vigor to suit the practical needs of modernization and construction of its own initiative. To a varied extent, schooling is divorced from economic and social development; and this retards the reforms in educational thinking, content and methods. To change this situation, some measures have to be taken, such as the decision on the priority of investment, the reform in labor and personnel policy, which is recognized as means of macrocosmic readjustment. Besides, some administrative and legal means ought to be utilized in this regard. However, any means would impossibly play its role to the fullest unless education is restructured.

The major problem with our current educational administrative system is that the relationships between the central authority and the local authorities, and between the government departments in charge of educational administration and schools, have not been well handled. Specifically, the central departments concerned exercise too much centralized management of concrete matters, thus dampening the enthusiasm of the local authorities. They exercise too rigid a control over the institutions of higher education, thus depriving them of their vitality. And the state taxes on too much of what ought to be done by schools, thus dampening the enthusiasm to run schools of the various quarters in the society. On the other hand, some matters which are within its functions and powers and should have been guided, readjusted and administered by the state, failed to be kept under the state's control. Under such circumstances, without a reformed educational system, it is bound to be difficult to bring about the development and reform of the educational undertaking as a whole.

(3) The major guidelines and the important strategic decisions of the document.

(A) The construction of socialism should depend on talent and on education while education should serve the construction of the socialist modernization which centers on economic construction and should be suited to the needs of the construction of socialist material and spiritual civilization. In order to promote coordinated development of the two sides, on the one hand, the emphasis should be placed on the role played by education in the construction of the four modernizations, thus treating education as one of the important strategic places. On the other hand, the educational system as a whole should be rationalized; the divorce of the educational thought, teaching content and methods from the needs of the construction of socialist modernization and from the development of science and technology the world over, should be ended; enthusiasm of various quarters should be mobilized to the fullest; and returns on investment in education should be raised. Consequently, education must be restructured.

(B) The policy under which funds for education are raised through various channels should continue to be implemented. The state funds for education (including those from the central resources and local resources) should be increased along with the development of economy. This should constitute the major part of the funds for education. In this respect, the central authorities had made two important policy-decisions: first, within a certain period of time, central and local government allocations for education should increase faster than the state's current revenues, while average per-student expenditures will gradually increase; second, local authorities are allowed to levy extra charges for education, thus opening another important channel of resources for the development of primary education. In order to expand financial resources for education, state-owned enterprises, public organizations and individuals are encouraged to run schools. Compared with the developed countries, the educational expenses in China will remain relatively low for a considerable period of time. Therefore, we should make efforts to use limited resources efficiently rather than expect a dramatic increase in state appropriations and the funds raised from various quarters of the society. This means that through reforms enthusiasm of every aspect should be fully mobilized so that the return of the investment in education may be raised. We should admit that there exists potential for raising the return of the investment in education. For instance, in primary education, the enrollment is very large and the proportion of the children of primary school age enrolled is quite high, but the standard of education at this level is comparatively low. As a result, some graduates from primary schools are only up to the standard of education for grade 4 or grade 3 or even lower. Here the key factor is teachers. Therefore, the interaction between the speed of the development of universal education and the development of teachers should be taken into account. Unless we make great efforts to increase quantity and to improve the quality of teachers, the outcome will surely be unsatisfactory even though the rate of development might be quite high. In higher education, especially in some colleges and universities with a long history, the ratio of teaching and administrative staff to students is still irrational. The load of the service division within a college or university is too heavy, therefore their potential has not been brought into full play. As for the secondary vocational and technical schools, their potential can be further tapped. Without a doubt, it is the defects of the irrational educational system rather than individual schools that made the undesirable return of the investment in education.

(C) The fundamental purpose of reforming the educational system is to improve the quality of the nation and to supply a sufficient number of highly qualified personnel. Qualified personnel include laborers as well as people with professional skills of all types at all levels. What does it mean by "to supply highly qualified personnel"? It means that to train students as persons of moral integrity with lofty ideals, who are well educated and disciplined; to train them to have a deep love for the socialist motherland and the socialist cause, and to train them to have the spirit of devotion to the prosperity of the country and the welfare of the people. To this end, ideological and political education

should be strengthened and schools should be built into solid positions for advocating socialist spiritual civilization. Compared with the officially published "Decision," several major revisions were made in its tenth draft. For instance, in Part I, the new formulation of "adhering to socialism" was added to the paragraph dealing with preparation of qualified personnel of all types at all levels. "Nor have enough efforts been made to educate them in Marxism in a vivid and lively way" was added to the third major problem in Part I. The phrase of "according to dialectical and historical materialism" was added to the sentence concerning reforming teaching content and methods in Part IV. All these revisions were made according to the suggestions put forward by the Political Bureau as a result of its discussions on the draft of the "Decision." This shows that the CCCCP has paid great attention to the construction of socialist spiritual civilization. With respect to intellectual education, we should not only train students to have a command of certain advanced cultural and scientific knowledge, but also pay enough attention to helping them develop, from early childhood, the ability to live and think independently and to foster their enterprising spirit and initiative. Only when this goal is attained, can the qualified personnel that we supply adapt to the task of political struggle and economic competition under the circumstances of implementing the policy of opening to the outside world and invigorating the domestic economy. Thus, we must improve and update teaching contents and reform educational and teaching methods. However, it is more important to make great efforts to eliminate the harmful influence of the out-of-date educational thought left by the long feudal history. Concerning foreign experiences, we should carefully distinguish between advantages and disadvantages, and should excel at learning strong points from foreign countries.

(D) To institute a 9-year compulsory education plan is a major strategic decision made by the CCCCP which has an important bearing on the future of our country. China is a massive country in which economic and cultural development is imbalanced from place to place. Therefore, the demand and content of a 9-year compulsory education plan could only be implemented according to local conditions. On the basis of these realities, places fall roughly into three categories. First, in cities, costal provinces and a few inland areas which are economically developed, compulsory junior middle school education may and should become universal by 1990. Then compulsory senior middle school education should be universal and a certain proportion of the population will have received higher education or vocational and technical education by the end of this century. As a result, in this part of the country with a population of 250 million, the standard of its secondary education would approach that of Japan at present. Second, in towns and rural areas which are economically semi-developed, compulsory junior middle school education should be universal and the proportion which will have, by 1995, received vocational and technical education and higher education among the population will increase remarkably. As a result, in this part of the country with about half of the total population, its educational development would come to a middle standard. Third,

in the economically underdeveloped areas, a variety of measures should be taken to spread primary education in varying degrees as economic development permits. Each different area should make great efforts to work out the optimum plan for educational development, thus the educational undertaking would not only play an excellent part in the local economic and social development but also be geared to the actual circumstances. Considering the whole country, implementing such a strategy for development which suits the local conditions will race against time. During the expansion of the developed areas, they will be able to do much to assist the under-developed areas which may develop more rapidly with this assistance. For example, the central government has, in light of its special situation, taken special measures to speed up the development of the educational undertaking in the Tibet Autonomous Region.

In order to attain the goal previously mentioned, two major measures are put forward in the document. One is to make the building of a mighty, qualified and stable contingent of teachers a strategic measure which must be taken ahead of the rest. The document makes principled stipulations under which the salary of teachers in secondary, primary and kindergartens would be raised. The other is to entrust local governments with the responsibilities of developing primary education and gradually introducing a 9-year compulsory education plan. The central authorities will concentrate on formulating overall guidelines and macroscopic planning, while the implementation of concrete policies and regulations will be handed over to the local governments. Of current state's revenue, the share of the central authorities makes up about 50 percent. In the days to come, the central government will continue to make an appropriation for local educational undertaking, meanwhile, entrusting the local authorities with the responsibility of developing their primary education would further mobilize the enthusiasm of the local governments and of various quarters of the society to raise funds for running schools. The division of work and authority among officials at the provincial, city or prefectural, county and township levels is to be decided by each province, autonomous region and municipality.

(E) Everyone holds that vocational and technical education should develop rapidly in China since it has a direct bearing on our country's economic construction. The experiences of the developed countries, such as West Germany and Japan show that education of this type is of great importance. Germany called it the "secret arm" for their economy's taking off, while the Japanese believe that it "saved them from the most difficult period after World War II." In recent educational reforms in the Soviet Union, emphasis has been placed on developing vocational and technical education. In the United States, there are about 3,000 institutions of higher education while over 8,000 postsecondary non-collegiate institutions are functioning. Due to historic reasons, including old China where little advanced industry, agriculture and commerce existed, no adequate attention has been paid to this type of education. Since the founding of New China, there have been several ups and downs in educational circles.

The most terrible one went with vocational and technical education. During the "Cultural Revolution," it was nearly finished off. One of the reasons was that the out-worn concept of belittling vocational and technical education was deeply rooted. Another reason was that the employing units did not pay adequate attention to the training and assessment of their employees. In order to speed up the development of vocational and technical education, the document stresses that we should carry out reforms in relevant rules and regulations of the labor and personnel systems side by side with the restructuring of education; that anyone seeking a job must meet certain political, cultural and technical qualifications; that the principle of "training first, employment second" should be implemented; and that no one, particularly those engaged in highly specialized and technical work, should be allowed to take up the job unless he (or she) has received his (or her) qualification certificate. These requirements would mobilize the enthusiasm of employing units and employees and relate development of vocational and technical education with the increase of benefit of enterprises. The development of vocational and technical education has something to do with our current wage system. In some economically developed countries, the starting salary for graduates from vocational and technical schools is not lower than that for their counterparts from colleges and universities. Considering the realities of China, with reference to experiences of foreign countries, a training plan has been put forward, by which youngsters would, at the stage of secondary education, begin to be divided to advance along separate routes. Through three types of divisions at stages of post-primary, post-junior middle, and post-senior middle school education respectively, most teenagers would receive varied levels of vocational and technical education. Thus, step by step, a vocational and technical educational system that is well balanced and also links up with the regular school education will be set up. Furthermore, with respect to the guiding principle for running schools, the "Decision" stresses that vocational and technical education should suit the needs of economic and social development. When dealing with forms of running schools, it was emphasized that individual, collective and other factors should be encouraged to run schools and all units and departments should be urged to set up vocational and technical schools on their own, or in cooperation with each other, or with educational departments. As for the administrative system, the local authorities have the chief responsibility for running schools of this type and they are expected to assist and cooperate with the departments of the central authorities in the undertaking.

(F) The general guideline for reforming higher education system is that the structure should be readjusted to the needs of the society as a whole, so that the institutions of higher education will have the enthusiasm for meeting the needs of economic and social development and have the ability for self-readjustment. In the document, special emphasis is placed on two respects: first, the enrollment and job-assignment system should be changed; second, universities and colleges will be granted more decision-making powers. In the past,

enrollment plans failed to fully reflect the social needs, and state job assignment for all college graduates had quite a few drawbacks: employing units would not treasure and make good use of qualified personnel; colleges and universities were not geared to the needs of the society; and students' enthusiasm and sense of responsibility for making progress would not be fully mobilized. After repeated considerations, now the document states that it is necessary to do a good job of overall planning for development of higher education and making medium- and long-term estimates of the demand for skilled people so as to improve enrollment planning. In order to ensure that a certain number of graduates will go to work in outlying areas and in trades and professions where working conditions are harsh, a number of students, forming a fixed proportion in the state plan, will be enrolled from these areas and trades and professions. Enrollment according to state plans now still constitutes the principal part of the entire enrollment. With regard to graduates in the category of enrollment according to state plans, they will, under the guidance of the state plan, be assigned upon graduation with due consideration to their wishes, the school's recommendations and the employing units' preference. Meanwhile, it is confirmed that the system of enrollment by commission from units that need graduates should continue to be implemented, and it should be made as an important supplement to the state enrollment plan. Since 1983, the enrollment in this category has doubled annually. The practice for over two years has proven that with this system being implemented, commission units can get the qualified personnel they need, the students have a sense of responsibility, thus studying harder, and schools have opened an extra channel of resources. However, it should be stressed that its development is not allowed to go beyond the limit, that is to say, it is not allowed to disturb the state plan. Besides, colleges and universities are allowed to admit, outside the state plan, some students who provide for their own expenses. Such students will have to pay their tuition fees and other expenses. In the near future, to begin with new students, ordinary students will have to pay their tuition fees. In view of China's present low-wage system, college and university costs are impossibly expensive. Therefore, the document stipulates that all students, except those in normal schools and colleges, those who will work in hardship after graduation and those who are unable to support themselves, have to pay their board and lodging expenses, tuition and fees for extras. As for the decision-making powers entrusted to colleges and universities, the document makes principal regulations. Furthermore, it asserts that in light of the different conditions, in colleges and universities, the central authorities will endow them with other powers.

(G) With regard to strengthening leadership, the document puts emphasis on two respects. One is the establishment of the State Education Commission which is responsible for formulating the guiding principles for education, planning the development of the educational undertaking, coordinating the educational work of different departments, and arranging and guiding the educational reform in a unified way. While power developed on subordinate units, legislation regarding education should be stepped up. The State Education Commission is an entity with maximum power and headed by one of the leaders of the State

Council. The other deals with the internal, administrative system of a school. The "Decision" stipulates that the system under which the principal or president assumes full responsibility should be gradually applied, that where conditions permit, an administrative committee or senate headed by the principal or president and composed of a small number of prestigious people should be established to exercise the power of review and supervision, and that the system of congress of teachers and other employees, with teachers as the core, should be set up and consolidated to ensure more democratic management and supervision. Meanwhile, the document discusses the responsibilities and requirements of the Party organization within schools. To attain the goal, the initiative of administrators should be brought into full play, while Party's work and political and ideological work should be practically improved.

Current Educational Reform and Research in China

Wu Wei*

Part I. The Current Educational Reform in China

There have been many changes in the field of education since May, 1985, when the "Decision on Reforming the Educational System Made by the Central Committee of the Chinese Communist Party" was published. People in all fields, especially those holding various leading positions of the Party and government, have more and more realized the importance of education, and the prevailing trend of respecting teachers, knowledge and qualified personnel is current in the whole society.

Seven topics that reveal the major problems of educational reform in China are discussed here:

(1) Rectifying the goals of education and implementing the educational policy

The overall guiding policy of education in China is that "Education must serve socialist construction and successful socialist construction must rely on education."

Today the major problem in the goals of education that needs to be reformed is the trend of ensuring that higher proportions of students enter schools of higher quality. There is nothing wrong with the motive itself; the problem is the means of doing it: instead of putting emphasis on training needed personnel for the society so as to implement the educational policy, many schools compete solely for more students going to schools at higher levels. This phenomenon is prevalent not only in primary and secondary schools, but also in kindergartens and undergraduate education. Many schools are not trying to fulfill the dual tasks of general education, leaning to only one side: preparing new students for schools of the next level. Consequently, the attention of teachers is paid only to a few "key" classes and "intelligent" students. School teaching is dominated by stuffing knowledge into students' heads, teaching and learning are modified to prepare for the annual college entrance examination. The result is that many students with high examination scores lack real analytical and practical ability, students' health is damaged and their spirit is depressed.

Exaggerated efforts to ensure that a higher proportion of graduates proceed up to next level of the educational system is a syndrome of the society. It is by reforming educational goals and doing away with the decayed concept inherited from the old society that this erroneous tendency can be corrected. Although both teachers and schools are responsible for this deviation, the real origin can be found in the policy of education and the system of education. Four measures are being taken to deal with the problems.

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(A) Forming the appropriate public opinion in the society as a whole, the key concept of which is to view "talent" in a correct way. The society needs people of talent in many roles, on all different levels and for many different purposes. In China, today, there is a need to further establish the notion that all professions have the same social status, and that one can be successful in any field. Students, parents and the society must be made to understand that formal schooling (especially higher education) is not the only route to future success. With determination and persistence, informal education or study by oneself can achieve the same purpose.

(B) In the last few years, follow-up study on the school graduates has been conducted to learn about their performance after graduation, to see how they can fit themselves into the society. The results of the study have helped in deciding on the directions of reform. This study has achieved obvious positive effects.

(C) At schools, the principle that teaching should be geared to the majority of students must be implemented. In the last few years, it has been emphasized that the teaching standards should be set in light of the actual conditions of the majority of schools, so that the over-heavy load of students may be lightened. There is also a policy that wherever junior middle school education is universalized, the entrance examination from primary to junior middle schools should be abolished, so that this group of students can be freed from the pressure of competition for the next level of education. In the last few years, the principle of "teaching for all the students" has not been effectively implemented. The most intelligent students have received more attention and help from the schools and teachers, and this must be changed. Now, teachers are asked to improve their teaching methods, to help the less bright or even the "backward" students to raise their interests and self-consciousness in learning, and thus to improve the overall education. Rectification of educational purpose is closely linked to scientific educational evaluation system and the system of superintending. The criteria used to evaluate school success should not be only the percentage of the students going up to the next higher level of schools, rather, they should more reflect how the task of training students is fulfilled and how the employed graduates perform in their positions.

(D) The key factor in the comprehensive administration of education is to link the educational system to the system of labor management, the system of personnel management, and the wage system. In recent years, the experiment has already been carried out in some areas in China. In 1986, the State Commission of Education met with the other relevant government departments, discussing the reforms in the system of employment. One possible outcome is to implement the principle of "training first, employment second." This will facilitate the development of vocational and technical education, and help change the present situation of intense competition for formal higher education.

In order to reform educational goals, a fundamental step is to have a clear understanding of the educational policy and the purpose of school education in the new era. Premire Zhao Ziyan points out in "The Report on the Seventh Five-Year Plan": "schools of all levels and types should implement the principle of developing in an all-round-way--morally, intellectually, physically and aesthetically. And according to the situation of different fields of study, appropriate emphasis should be placed on manual labour education. The priority of our education is to raise educational quality, and to train qualified personnel." This new emphasis reflects the requirement of the new era of socialist modernization. School education is now stressing aesthetic education, giving it the same importance as moral, intellectual and physical education. This is in line with the country's objective of constructing "two civilizations" simultaneously (spiritual and material civilizations). Another major change in the new era in school education is to add to appropriate productive labor education. This is to raise the educational quality and its efficiency, to improve the content and methods of teaching and productive labor.

The all-round development in the five aspects of education (moral, intellectual, physical, aesthetic and labor) is seen as the essential way of training qualified personnel for the realization of socialist modernization. At present, there is a universal problem in school education in China: the five aspects are not receiving the same attention as they should have. The physical, aesthetic and labor aspects of education are neglected and moral education is not given enough attention. Political and moral education is limited only within the classroom; out-of-class and after-school education is ignored. In classroom education, there is the problem of too much book knowledge and dogmatic teaching, divorced from students' culture and the real life of the society. There have been efforts to correct this common practice: reforming the courses on political theories and moral teaching at all levels of school, and stressing the cooperation of schools, families and the society. Political and moral education in school is to be reformed to meet the needs of the new era, the central theme being patriotism, which should be incorporated in the teaching contents of primary and secondary education and in the activities both in and out of schools. Students should be trained to establish lofty ideals and the willingness to serve the people wholeheartedly, to develop socialist morality, ethics and traditions to build u the sense of democracy, law and discipline, and to appreciate aesthetics. The ability to appreciate beauty cannot be separated from political and moral consciousness. The effective implementation of the educational policy in these five aspects will help to raise the quality of education in China, and to train quantities of socialist citizens with lofty ideals, high morality, intellectual abilities, and a good sense of discipline.

(2) Universalizing nine-year compulsory education

Universalization of compulsory education is the important symbol of modern civilization. It is the base on which qualified personnel can be

trained and manpower resources of the Chinese nation can be efficiently exploited. The training of qualified personnel cannot, by any means, be accomplished in a short period of time. A solid foundation must be laid in primary schools, on which further improvement, step-by-step, can be made. "Decision on Reforming the Educational System Made by the Central Committee of the Chinese Communist Party" that was published in 1985 stipulates that nine-year compulsory education should be instituted step-by-step in China. In April, 1986, the People's Congress formally adopted the Law of Compulsory Education in the People's Republic of China. Before long, the President of the People's Republic of China promulgated an order to publish it and make it effective July 1, 1986.

China is vast in territory and the situation varies from place to place. Due to the factors of natural environment and history, economic and cultural development is unbalanced regionally, or even within the same area, the same province and the same county. Therefore, the principles of "being practical and realistic" and "suiting measures to local conditions" must be implemented. No areas should compete with each other in either speed or targets of development regardless of their real resources. In China, universalization of nine-year compulsory education will cover two phases. Universalization of junior middle school education has to be accomplished only on the basis of universalizing primary education both quantitatively and qualitatively. Today, in all large and medium-size cities and some counties (townships) and rural areas, primary education has been basically universalized. The central government requires those areas where primary education has not been universalized to concentrate on universalizing primary education rather than on actively developing junior middle schools.

In China, the key to instituting nine-year compulsory education is in rural areas. The authorities at the level of township have now more responsibilities since we implemented the new system under which the administration of primary education is decentralized. How can authorities at the level of township do a good job in managing primary and secondary schools? How can they accomplish a series of tasks ranging from raising funds to run schools, improving physical conditions of schools, to efficiently managing all aspects of teaching and education? These are the major problems that they have to solve now and in the days to come. In the last few years, many provinces, cities and counties shifted their attention to strengthening the administration of education at the township level. For instance, Haicheng City in Liaoning Province has established the system of job responsibility under which the leading cadres of the Party organizations and governments at the levels of city, township and village are responsible for education at their respective levels. Jiangsu Province has decided to select capable cadres to strengthen government organizations at the level of township and to be responsible for managing education. In addition, it has supplied education supervisors for each township. The province stresses the training of supervisors, who are, group after group, at different times being sent to teachers' colleges or colleges of education for refresher courses for half a year or one year.

In order to promote universalization of nine-year compulsory education, the State Education Commission, with the approval of the State Council, commended, on the occasion of the Teacher's Festival in 1986, 100 model counties on their success in basic education and awarded some advanced individuals and groups for their remarkable contributions. Li Peng, Vice-premier of the State Council announced that each of these advanced individuals has won a "Medal for the People's Teacher" and is eligible for the preferential treatment provided for model workers at the Ministry level. This type of commendation has now become a regular practice every year.

(3) Restructuring education

In recent years, we have made great efforts to change the ratio between higher education and secondary education by vigorously developing vocational and technical education. Our socialist modernization not only requires senior scientific and technical experts, but also urgently needs millions of intermediate and junior engineers, managerial personnel and technicians. The general enhancement of the quality of labor is also needed. In 1978, the enrollment of the secondary vocational and technical schools made up only five percent of the total enrollment of senior middle schools. By 1985 this proportion increased to 36 percent. However, it should be recognized that the base of vocational and technical education is still weak, especially in rural areas. It has been stressed that education in the rural areas should serve the rapid development and prosperity of local economy. In developing vocational and technical education in rural areas, we should take measures suitable to local conditions and run schools in a flexible and varied manner: vocational and technical courses may be added to the curriculum, graduates from junior middle schools may receive vocational and technical education for an extra year, or vocational training for a shorter term. In order to improve the efficiency of education, vocational and technical education for students prior to employment and peasants' adult education should be arranged and managed in a coordinated way.

By means of restructuring the secondary education and developing vocational and technical education, the proportion of intermediate skilled workers in the total number of workers and staff members will, during the seventh "Five-Year Plan," increase from 27 percent in 1986 to 50 percent, the relevant proportion of senior skilled workers will increase from two percent in 1986 to five percent, and the majority of rural junior and senior middle school graduates who return to do farm work in their villages (the total number is 120 million) will receive varied levels of vocational and technical training.

It is necessary to restructure higher education and to change the distribution of disciplines offered by the institutions of higher education. Here, one important problem is that work should be rightly divided up among the institutions of higher education in the light of the society's varying needs for qualified personnel. China's existing

colleges and universities may roughly fall into three categories. The first category includes a few colleges and universities with a relatively strong capacity for teaching and research, where, in addition to training of undergraduates, advanced degrees are given and centers of teaching and research are gradually being formed. The second category includes the majority of the institutions of higher education where the major task is to train undergraduates. Meanwhile, they should also conduct certain research and academic activities in order to enhance the quality of teaching, and their emphasis should be placed on developing applied research and providing science and technology service to the society as a whole. The third category includes short-term colleges for specialty training where the major task is teaching. Their attention should not be diluted by conducting research, so that the proper quality of teaching can be guaranteed. In the past, we did not devote much attention to this last category. Recently, they have developed at a high speed. However, the distribution of disciplines offered by this category of colleges is still not rational. There are too few students in certain disciplines. Such a phenomenon should be remedied in the days to come. In respect to specialties offered by the institutions of higher education, enrollment should be appropriately enlarged in such special fields of study as agriculture, animal husbandry, fisheries, and their product processing, textiles and dyeing, architecture and building materials, management and finance, and economics. The organizations concerned should give priority to help improve the material conditions for these disciplines. Through reform and readjustment during the seventh "Five-Year Plan," efforts should be made to attain a rational distribution of disciplines and a rational structure of higher education within which an appropriate ratio can be maintained among the numbers of post-graduates, undergraduates, students in the short-term colleges and students in secondary vocational and technical schools.

In the past, specialties in liberal arts were offered by colleges and universities in such basic disciplines as literature, history, philosophy, economy, and law, and their major purpose was to train teaching and research personnel. Now, however, their major purpose has been changed to the training of a great number of managerial personnel in different fields. As the economic reform deepens in China, the central authorities have been trying to shift their management of enterprises from direct control to indirect control, that is to say, the central authorities will manage enterprises mainly by means of economics and law, and, when necessary, employ administrative means. Consequently, the institutions of higher education are required to train qualified personnel in finance, banking, audit, statistics, business management, and the law of economics. Meanwhile, in order to strengthen the construction of the spiritual civilization, colleges and universities are all required to train an even larger number of qualified personnel in theory, literature and art, journalism, publishing, and political and ideological work. The purpose of the basic disciplines is also shifting from training mainly teaching and research personnel to training mainly practitioners.

In developing higher education, the principle of "walking on two legs" should be continued. This means while efforts are made to do a good job in developing full-time general higher education, great efforts should be devoted to developing various forms of higher education, such as broadcasting and TV universities, correspondence colleges, spare-time universities, evening universities and self-study for diploma examinations. General institutions of higher education, while working hard to accomplish the task of training full-time students, should, given possible conditions, increase the enrollment of correspondence divisions and evening programs. In developing and reforming adult higher education, the principles of "studying for the purpose of application" and "stressing practical results" should be stressed while deviations of ignoring quality, and of blindly seeking "high levels" of education, certificates and credentials of formal education should be guarded against.

(4) Reforming the administrative system and other systems concerned

In order to increase the ability of institutions of higher education to serve the needs of economic and social development, the central authorities, while strengthening and improving the administration on the macro level, should grant more decision-making power to the institutions themselves. To this end, the State Council issued, in June 1986, "The Temporary Provisions on the Administrative Responsibilities of Higher Education," which specifically stipulates the responsibilities of the State Education Commission to guide and administer higher education, and clearly defines the responsibilities of the ministries and commissions concerned under the State Council to manage the institutions of higher education affiliated to them and the responsibilities of local authorities to manage higher education. The essence of this document is to grant colleges and universities more decision-making power and to encourage them to explore the innovations in curriculum, teaching methods, administration of student affairs, administration of research, and of logistics, so that the quality of teaching and management can be improved. In the future, a new administrative system under which the institutions of higher education are managed by central cities around or within which they are located, will gradually be implemented, after conducting tests at selected points.

In restructuring higher education, there is also a problem of horizontal connection of the institutions of higher education, research institutions and the enterprises. The connection which Qinghua University and Beijing University have built respectively with the Chinese Academy of Science falls into this category. As for the horizontal connection among the institutions of higher education, it takes various forms. Regional connection exists within a province, a municipality or an economic cooperation zone. Cross-regional connection exists between the interior and the border areas, or between the costal cities and the interior. There are also cross-department and

cross-system connections. Today horizontal connections among the institutions of higher education are forging ahead both in depth and scope. For example, the students of Nankai University and the students of Tianjin University may take each other's courses. The two universities may recognize each other's credits. The faculty members on the two campuses may teach in each other's institution and cooperate with each other in supervising graduation projects or degree theses. The two sides share each other's information and cooperate with each other to undertake projects. They are planning to build new special fields of study and develop new disciplines together. At present, this type of horizontal connection of higher education has proved effective, and in the future great efforts will surely be devoted to its development.

Enrollment planning and job-assignment for college and university graduates should continue to be reformed.

Enrollment in colleges and universities falls roughly into three categories: enrollment according to state plans, enrollment by commission from units that need graduates; and enrollment of self-supporting students outside the state plan. The students of the latter two categories are not allowed to squeeze out the facilities for study and living reserved for those in the first category.

As for the reform of the people's grants-in-aid system, the State Council approved, in July 1986, the report submitted by the State Education Commission and the Ministry of Finance that proposed to implement a new system under which scholarship and student loan exist simultaneously. Scholarship falls into three categories: first, scholarship for students with distinguished academic records; second, scholarship for students in the specialties of teacher training, agriculture and forestry, physical culture, minority nationalities, navigation and so on; and third, scholarship for the students who will go to work in outlying areas, in needy areas, and in trades and professions where working conditions are harsh. The purpose of the student loan is to help a small number of students who are unable to support themselves. Offered by banks, this low-interest loan should be paid back by students after graduation, but may be remitted, subject to verification and approval, for those who will go to teach in primary and secondary schools or to work in mountain, border, needs, and poor areas. In 1986, this new system was tried out among new students of some colleges and universities.

The post-graduate enrollment and training system should be reformed. In the future, the admission requirements should be determined in the light of different specialties; some specialties may enroll new postgraduates from graduating students while others may do so from those presently employed with practical work experience. Postgraduate education is one way of doing post-higher education rather than the only way to do it. A large number of senior qualified personnel in the applied and practical fields of study that the

socialist construction needs may be trained by various ways of post-higher education. We'll continue to try out the new system under which those presently employed are allowed to apply for advanced degrees. We are planning to establish a few new advanced degrees, such as doctorates earned by successfully defending the dissertation, doctorates earned by successfully completing projects, and doctors of clinical medicine. By so doing, a new channel will be opened up through which senior qualified personnel may be awarded advanced degrees.

With the purpose of improving and strengthening administration of adult education, the Commission of Administration and Coordination of Adult Education was established in February 1986. In the same year, the State Education Commission made a thorough investigation into adult education. It also plans to convene a National Conference on Adult Education, at which decisions on reforming adult education will be made. In order to suit various needs of different learners, three types of certificate for adult higher education will be established (certificate of formal schooling, certificate of specialty qualification, and certificate of job-post qualification). Since 1986, the national unified examinations for adult higher education began to be administered so that its due quality can be guaranteed and its administration on the macro level can be strengthened.

(5) Implementing the reforms in teaching

One of the important components of educational reform is the reform of course content and teaching methods. Schools at all levels have made efforts; and consequently, certain success has been achieved.

In reforming learning in liberal arts, attention has been paid to the following aspects. First, some applied courses have been added to the curriculum resulting in a new curriculum in which applied courses can be integrated with theoretical courses. In liberal arts at normal colleges and universities, practical courses on quantitative analysis and technological techniques, have been offered in order to develop the students' abilities. A number of colleges and universities of arts also began to offer some interdisciplinary courses. Second, some out-of-date course contents have been cut out while some new ones have been added. For instance, in the specialty of economics, the content dealing with its history has been cut down while materials on the mechanism of the present economy has been added. Third, attention has been paid to the necessary social investigation in order to integrate theory with practice and to develop students' abilities to analyze and solve problems. And finally, teaching methods have been changed to some extent. The emphasis is now placed on developing students' abilities to think and to work independently through studying independently. Some successful teaching methods, such as class-discussion, seminar, and questions-and-answers have been employed, and the result is, generally speaking, satisfactory.

At present, the institutions of higher education are trying out the credit system. Some institutions allow students to change their special fields of study or take courses offered by other specialties than their own. In colleges and universities of science and technology, emphasis is now placed on the practical aspects in the teaching process and on the field work in factories and enterprises.

In primary and secondary schools, curriculum, teaching content and methods have been changed according to the educational policy of "gearing toward the future, the world, and the modernizations." In the current teaching programs and course contents, the tendency toward over-emphasizing the needs of the students who will enter colleges and universities and neglecting the needs of those who will enter the labor market should be changed. Now, efforts are made to redefine the basic standard of teaching in accordance with the needs of China's social and economic development and the trend of the modern development in science and technology. Cramming has been replaced with heuristic methods so as to lighten the overload of students while enabling them to have a better grasp of the knowledge in a more active way. In September 1986, the major reform in the system of compiling and revising teaching materials was implemented. Compiling and examination of teaching materials will part rather than combine into one as it used to be. The institutions of higher education, research institutions, specialists, scholars, teachers, as well as local authorities will be encouraged to compile teaching materials which will be published and put into use if they are approved by the Commission on Examining Teaching Materials. A variety of teaching materials will gradually emerge and their quality will be raised through competition and comparison.

(6) Strengthening the teaching profession

For the successful undertaking of education, the key is to have a stable population of teachers that suit the needs of modernizations--quantitatively, qualitatively, and structurally.

Teacher's colleges and universities are the backbone of the teacher training for all levels of education. In recent years, emphasis has been placed on the principle according to which normal colleges and schools must serve primary, secondary, as well as pre-school education, and all of their graduates must be assigned to work in those schools. In order to enhance the social status of teacher's colleges and enable them to admit students with satisfactory academic backgrounds, a new system is tried out, under which they are allowed to recruit students independently or in advance within the province, autonomous region and municipality where they are located. Other colleges and universities are also required to bear a part of the responsibility for training teachers for secondary schools. As for the enhancement of teachers' quality, besides strengthening colleges of education, one of the measures taken is to send officials from party and government departments to help train primary and secondary school teachers. In 1985, over 3,000 officials of the central Party and government

departments were sent, while in 1986, the number increased to 6,000. The practice has spread to local Party and government departments since 1986 and will be maintained in the coming years. Furthermore, China began in 1986 to provide television courses via satellite for teachers of primary and secondary schools, especially for those teaching in rural areas. Consequently, a new way for their self-improvement through independent study has been paved.

(7) Systematically improving legislation in education

In the past, not enough attention was paid to establishing laws concerning education. Recently, along with the strengthened sense of democracy and legal system, establishment of laws concerning education is emphasized. In 1986, "Law of Compulsory Education" was issued for enforcement, while "Basic Law of Education," "Law of Education," "Law of Higher Education" and "Law of Technical and Vocational Education" are in the process of discussion and drafting. Still, in some aspects, trial regulations need to be made, and then revised step-by-step, before becoming laws. "Regulations for Administration of Persons Studying Abroad," "Provisional Regulations for Establishment of General Institutions of Higher Education," "Provisional Regulations for Establishment of Special Fields of study Within General Institutions of Higher Education" and "Trial Regulations for Establishment of the Institutions of Higher Education and Secondary Technical and Vocational Schools by various quarters of the Society" will be made and published one by one. The local authorities have been involved in this development. Statistics indicate that in 1984 and 1985, 28 provinces, autonomous regions and municipalities made and published a total of 41 local laws concerning education, 28 of which deal with primary education, 6 with adult education, 4 with technical and vocational education, and 3 with higher education. In 1986, another 58 local laws concerning education were drafted.

Part II, China's Research on Education Science

China's research on education science took off quite late, and has taken a tortuous road. It wasn't until the late 1950s that the institution of education science at the central level--the Central Institute of Education Science--began to emerge. During "the Cultural Revolution" from 1966 to 1976, both China's educational undertakings and its research on education science were severely devastated. After the fall of the Gang of Four, especially after the Third Plenary Session of the Eleventh Party Central Committee, China's research on education science began to be restored and developed gradually. Generally speaking, however, its base is not strong enough and its contingent not adequate enough both quantitatively and qualitatively.

Now, China's major institutions of research on education science are composed of three parts. First, both at the central level and at the level of province, autonomous region and municipality, institutes of education science have been set up employing 1170 full-time research

workers. In addition, institutes of education science have been established in a number of counties and some districts under metropolises. Second, there are the institutes of education science affiliated to colleges and universities. Sixteen normal colleges and universities have established their institutes of education science while nearly 300 comprehensive universities and colleges of science and technology, agriculture and medicine have set up their institutes (programs) of higher education science. About 2,000 full-time research workers are on their regular payroll. And third, some democratic parties and people's organizations have established special organizations or assigned special persons to research on education science. Besides, there are a few full-time and many part-time research workers in schools, government departments of educational administration and other departments concerned, including some large enterprises.

In China's research on education science, the principle of "unified planning and administering according to the different levels of projects" is implemented. There exists the National Leading Group for Research on Education Science that administers and coordinates this endeavor. Generally, projects of education science may be divided into three levels: first, the state's major projects that are planned and administered by the National Leading Group for Research on Education Science; second, major projects at the level of province, autonomous region and municipality that are planned and administered by the departments responsible for the work at the corresponding level of authority; and third, projects that are selected and administered by institutions of education science or colleges and universities.

In recent years, we have accomplished the following types of projects:

(A) Applied research for educational decision making and guidance. Directed by Beijing University, the Central Institute of Education Science, and Beijing Normal University, over 100 teaching, research and administrative personnel participated in the state major project, "The Rational Ratio of the Fund for Education in the National Income and the Analysis of the Economic Returns of the Investment in Education." This project lasted for two and a half years. It, received positively by the leaders of the central authorities, makes a brilliant exposition on the fund for education. "The Prediction and Planning of People with Professional Skills" and, subsequently, "Study on China's Education in 2000" put forward a new plan with a theoretical and practical basis which, consequently, serves as worthy reference for the decisions of the strategy of China's education. In addition, the projects on the educational policy, on the structure of China's higher education, and on training of senior qualified personnel, have also played a positive role in structuring China's education.

(B) Research on basic theories of education. In recent years, discussions and studies on the nature of education have been unfolded in the circles of education. They have enlivened people's thinking and

deepened their understanding of the nature and the function of education. In addition, extensive discussions were carried out on such topics as the relationship between traditional education and modern education, how to implement the principle of gearing toward the future, the world, and the modernization" in reforming China's education, and the purpose of moral education and the ways to reform it. In recent years, some books on the theories of education have been compiled and published, such as "Inquiring into the Educational Theory of Marx and Engels," "Educational Psychology - the Principle of Teaching and Learning," "Pedagogy," "The Theory of Higher Education," and "Psychology of School Management," all of which have attained certain academic level.

(C) Experiment on reforms in education ranging from innovations in the length of schooling and curriculum to changes in teaching materials and methods. A number of schools in Beijing, Heilongjiang, Jilin and Jiangsu carried out experiments on comprehensive reforms in primary and secondary school systems as a whole. Since 1983, the Institute of Education Science in Beijing, to counter the tendencies of students' unilateral development and overburden that existed at schools at the time, has unfolded an experiment with "all-round development of primary school pupils" in Hongmiao Primary School. The result has proved satisfactory since some measures, such as improvement in curriculum and classroom teaching, enriched extracurricular activities, and training courses for the parents, were carried out successfully. Now, this experiment plan has been adopted by over 50 schools in five provinces and municipalities. Jingshan School and Yuying school in Beijing, Jianqing School in Shanghai, and Experimental School in Liaoning Province have been experimenting on reforms in the length of schooling (the experiment with "5-4-3" system and nine-year system). Reforms in teaching materials and methods are also in experiment. The Middle School Affiliated with North-East Normal University is doing experiments in an integrative basic course in which the natural science is integrated with social science, while the Middle School Affiliated with Nanjing Normal University is in the process of experimenting with a variety of elective courses. Certain success has been achieved by both of them. The Research Team on Teaching Methods in the Central Institute of Education Science has persistently conducted experiments on reforms in the teaching materials and methods for the courses on Chinese and Mathematics in primary and secondary schools. As a result of their experiments, teaching programs, textbooks and reference materials for teachers have been compiled for the courses on Chinese, Mathematics and Science in primary schools and on Chinese, Mathematics and English in junior middle schools. These materials have been adopted in 3,395 classes of 1,250 schools that are located in 27 provinces, autonomous regions and municipalities. The achievement in this experiment that has lasted for over five years has been recognized as desirable.

At present, we are drawing up the state's program of research on education science during the Seventh Five-Year Plan. Its guiding principles are "Education should be geared toward the future, the world,

and the modernization" and "Education must serve socialist construction, which in turn must rely on education." Its emphasis is placed on the major research projects on theoretical and practical issues that are facing China's educational undertakings and reforms. At the same time, efforts are made to establish several special fields of study in education science so that a solid foundation will be laid for the research system on the education science that characterizes the socialist China. Therefore, the purposes of research on education science are considered to be the following: to provide some theoretical basis and feasible plans for policy-making for national and local reforms in education; to promote, in a planned way, the development and improvement of all special fields of study in education science; to compile the basic documents on China's education; to build, step by step, a contingent of researchers on education science with adequate quantity and high quality, and with a rational structure; to establish several zones for educational experiments and experimental schools that will provide some valuable experiences for reforms in education; and to improve facilities for research and to modernize, step by step, educational information and research work.

According to our experience, to engage in research on education science, we should correctly understand and deal with the following relationships:

(A) The relationship between theory and practice. In the current reforms in education, we are faced with many practical issues that require us to provide theoretical explanations and responses. For instance, macro-level guidance and administration of education involve the relationship between directive planning, guidance planning and readjustment to the social needs; the guiding principle and methods for drawing up the directive plan that suits the needs of the new situation; the ways to implement the guidance plan; and the relationship between the means of direct control, the means of indirect control using laws of economics, and the means of administration, and the changes in the ratio among the three. To solve all of these problems, it is necessary to go deep into the realities of education, to do a great number of systematic studies, and, sometimes, conduct quantitative statistical studies. Only by doing both quantitative and qualitative studies can we acquire a logical understanding.

In order to raise the standards of research on education science, experiment must be carried out. Generally, scientific research falls into four categories: theoretical research, verification research, historic research and experimental research. Since educational endeavors are noted for their long cycles, tardy effects and widespread influences, the conclusions drawn from the first three categories generally need to be tested against educational practices. Therefore, it is desirable to do an experiment within a limited scope and popularize it after successful results are achieved.

Full-time research workers are encouraged to integrate with part-time personnel, teachers and educational administrators. For

example, sponsored by the State Education Commission, the Seminar on the National Primary Education was held from September 1985 to July 1986, with 181 participants who were exemplary primary school teachers, principals and educational administrators selected from all parts of the country. Together with the research workers from Beijing Normal University and the Central Institute of Education Science and with the faculty members from the Central Institute of Educational Administration, they reviewed their own experiences and probed into the laws governing education. Consequently, 105 research projects on specific topics were accomplished resulting in a great number of theses and reports on their experiences totalling 3 million Chinese characters.

(B) The relationship between macro research and micro research. In the past, emphasis was placed on the micro research concerning mainly with specific reforms in teaching materials and methods, while such macro research topics as the overall study of educational system and the relationship between education, economy and society were neglected to a certain extent. Only in recent years has attention been paid to the macro research. Now, we have realized that neither macro nor micro research should be neglected. Therefore, they should combine with each other, since without the macro research on education as a whole and on the relationship between education, economy and society, the research on teaching materials and method would lack a strategic goal, or, worse still, act blindly. Conversely, without the micro research on such specific topics as teaching materials and methods, macro research would become generalities. Only through the combination of the two, can objective law governing education be found.

(C) The relationship between popularization and the raising of standards. For some historic reasons, China's research on education science has lagged behind the needs of its educational development and reforms, and it's theoretical standards are not high. It is an urgent task facing us to devote great efforts to raising the theoretical standards of our education science and to putting an end to the backwardness of research on education science. On the other hand, however, a great number of teachers at all levels of education are lacking the knowledge of education science. It is, therefore, an urgent need to popularize the knowledge of education science among them, which is essential both for raising teaching standards and for raising standards of research on education science. The evidence in some areas has shown that after popularization of the theoretical knowledge on pedagogy, educational psychology and educational research among the teachers, they would consciously follow the laws governing education and would deliberately learn from their practical experiences. All this is exactly what is needed to raise the teaching standards. Therefore, we must insist on the principle that the raising of the standards should be based on the popularization which, in turn, should be realized under the guidance of the raised standards.

(D) The relationship between criticism and inheritance. In the past, due to the harmful influences of the "Leftist" theory, emphasis was put on criticism while inheritance was ignored in our research work on education science. And even for a time, pedagogy, educational psychology and some right theories were criticized as fallacies. This had adverse consequences and hampered the development of education science. After the fall of the "Gang of Four," the principle of "seeking truth from facts" has been implemented in research on education science. We should make much effort to understand and analyze the rich cultural and educational heritage of the ancient China and the educational theories and experiences of other countries in the world so as to critically assimilate the useful parts of their experiences for our own benefits. This certainly is an indispensable condition under which China's education science is to forge ahead.

We have realized that to achieve development and prosperity in China's research on education science, the policy of "Letting a hundred flowers blossom, weeding out the old to bring forth the new" must be carried out conscientiously. Extensive and equal discussions should come forth on the basis of thorough investigations and individuals' independent thinking. Academic freedom should be stressed. It is only through contentions and deliberations among different viewpoints can people's horizons be broadened, their understanding deepened, and their academic standards raised.

On Educational Reforms in China

Liu Yi-fan

During the 37 years since the founding of the People's Republic of China, the educational sector has experience several reforms. Reviewing this process in retrospect, I feel that there are many important issues that need to be probed into conscientiously. In this article, I will dwell on a few such issues. It is my hope that such an inquiry will draw the attention of more comrades.

Social Development and Educational Reform

Education is a social activity to cultivate human-beings. It is one component of the social life restricted by various political, economic, technological and cultural factors. Political reforms, economic development, scientific and technological advances, and cultural evolution and transmission all give impetus to educational reforms. Educational reforms must suit and serve social development. If they fail to propel the society forward, they might retard or even hinder social development. Conversely, social development must depend on educational reforms. It is only in the realities of social development, that the success and failure, or the strengths and weaknesses of educational reforms can be assessed.

In terms of the suitability of the educational reforms to the needs of social development, the previous educational reforms in China fall into the following categories.

First, the educational reform that is carried out in accordance with the needs of social development and consequently pushes the society forward successfully. An example of such reform is the one carried out immediately after the Liberation. The purpose of that reform was to combat feudal, comprador bourgeois and fascist ideologies, to change the educational system of the old China, and to develop a national, science-oriented, and popular new democratic education. The success of the reform was remarkable. It not only revived and improved the educational sector in accordance with the needs of the social transformation, of the Korean War and the recovery of the national economy, but also trained and developed human resources for large-scale national construction. Another example is the educational reform carried out from 1952 to 1957. The focus of the reform was to learn from the Soviet experiences. Since the reform suited the needs of the socialist transformation as well as those of the political reform and the economic construction stipulated in the First Five-year Plan, the reform was fairly successful in promoting the development of socialist construction. However, despite its successes, the reform made some mistakes and had several short-comings.

Second, the educational reform that is carried out against the needs of the social development and consequently hinders the social development and sabotages the educational cause. An example of such

reform was the so-called "Proletarian Educational Revolution" during the Cultural Revolution. This reform was carried out by force to suit the needs of the Cultural Revolution. The Cultural Revolution stressed the political revolution of one class overthrowing another under the socialist conditions. It lacked both economic and political bases as well as the constructive guiding principle. The educational reform based on such erroneous philosophy is bound to go against the law of social development, damage economic construction, sabotage education and bring confusion and disaster to society.

Third, the educational reform that is strongly influenced by the changes in the society. The positive and negative factors in the political and economic development have definite impact on the educational reform. Consequently, the educational reform has both positive and negative sides. An example of this was the educational reform from 1958 to 1960. At that time, the general principle of socialist construction reflected the pressing will of the broad masses of people to put an end to the backwardness of the economy and culture, but it neglected the objective laws of economy and thus failed to suit the needs of the social development. The "Great Leap Forward" and the People's Commune movements were launched rashly. As a result of such political and economic transformation, the "Educational Revolution" played both positive and negative roles and had both positive and negative effects. On the one hand, it tightened the linkage between the schools and society; both teachers and students got tempered in the social practice and teaching, research, and production were integrated. On the other hand, education was expanded blindly, school discipline was confused and the quality of teaching deteriorated dramatically.

The current socialist modernization, the reforms in the economic and political systems, and the construction of spiritual civilization are all carried out with the economic construction as the central goal. It reflects the objective law of the socialist development. As an important component of the construction of spiritual civilization, educational reform becomes inevitable. The question is how to reform and develop education so as to integrate education with the socialist modernization. It requires understanding of the historic experiences and lessons, and careful and systematic study of the social needs for education under the all-round reforms and open-door policy. For instance, China had, for a long time, used the system of unified job-assignment for college graduates by the government since it was suitable in a highly centralized economy and personnel system. It played an important role in meeting the needs for jobs under hard working conditions. However, the system is too rigid and thus unable to motivate students, schools and other sectors in the society to take initiatives in training and utilizing qualified personnel. It does not promote the economic, scientific, technological and cultural developments. In recent years, with the deepening of reforms in the economic system, with the development of the commodity economy on the basis of state ownership, and with the broadening of political reform, the conflict between the central job-assignment system and social

development becomes increasingly acute. The major contradictions include:

*Small- and medium-sized enterprises and collectively-owned enterprises have developed dramatically in the economic reform but it is very difficult for them to obtain qualified personnel they badly needed.

*With the delegation of power made possible by the economic reform, the enterprise managers demand authority to select and hire employees in order to increase the strength of the enterprises and improve economic effectiveness. But the demand for and supply of personnel often fail to reach agreement.

*The reform has brought contract system to the personnel system. It is widely divergent from the former system of job-assignment.

*With the development of science and culture, it becomes necessary for some people to move from one sector or one area to another. They demand certain freedom in selecting jobs. The job-assignment system denies such freedom.

All these contradictions indicate that the former job-assignment system can no longer suit the needs of the social development and it is imperative to reform the system. However, as to how to reform the system so as to rationally distribute and use personnel, strengthen linkage between schools and society, motivate various sectors to support education and to increase the freedom of job selection, various experiments and theoretical studies are required.

Inheritance vs. Reform

Ever since the beginning of the human society, education has always existed side by side with production. The experiences accumulated by the predecessors have always been inherited and passed down the generations. Of course, inheritance is by no means to copy without criticism, but to take selectively. Our attitude towards educational experiences from feudal and capitalist societies is also to take the essence and discard the dross so as to reform ours and make further progress. Just as Lenin said, "...the harmful things of the old schools must be separated from those that are beneficial to us. We should be able to pick out from the old schools the things that are necessary to communism." This is our attitude towards the historic heritage and the existing experiences of education.

Since the founding of the new China, we have had both positive and negative experiences in educational reforms.

The educational reform carried out immediately after the Liberation was a fundamental transformation from the old semi-feudal and semi-colonial education into the new-democratic education. However, at the First National Meeting on Education held in December, 1949, it was

stated that: "...some educators in the old China have accumulated certain fine experiences beneficial to the people's educational undertakings due to the guidance of the progressive and scientific thinking." "...we are also against the attitude of negating everything in the old educational system and of refusing to accept the fine elements from the historic heritage...." These statements correctly expounded that the new education should critically inherit the old one.

The teaching reform from 1952 to 1957 stressed the transformation of the old education. This was a correct thing to do. However, the reform over-negated the old education and regarded the old education as "semi-colonial, deeply poisoned by the reactionary ideology of the European and American capitalism, and absolutely unsuitable to the needs of the construction of the new China." Meanwhile, it failed to define clearly the tasks of critical inheritance. The educational reform in 1958, although recognizing the achievements of education, stressed that "during certain period, education was separated from production, from reality, and to a certain extent, ignored politics and the leadership of the Communist Party." Because these two reforms failed to handle correctly the new relationship between inheritance and reform, the reforms, while achieving successes in some areas, caused some harmful consequences.

During the "Ten-Year Turmoil", the "Gang of Four" held that in the 17 years since Liberation, the proletarian educational policy formulated by Chairman Mao was not implemented and the educational system, the teaching policies and methods were still the same old stuff. Accordingly, they completely negated and broke away from the existing educational system, ignoring completely the issue of inheritance. In reality, this "Proletarian Educational Revolution" was a counteraction to the history of education.

Thus, it can be seen that whether an educational reform is correct and successful depends not only on the suitability of the reform to the needs of the social development but also on the correct handling of the relationship between inheritance and reform.

In the current educational reform, the relationship between inheritance and reform is reflected mainly in how to deal correctly with the traditional education. Generally speaking, traditional education is a specific concept in educational history and educational philosophy. John Dewey regarded the educational thought developed by Herbert and the educational system developed thereby as the traditional education and regarded his own educational philosophy as the contrasting modern new education (or progressive education). Dewey had a clear definition for traditional education. He wrote in his Experience and Education: "The main purpose of objective (of traditional education) is to prepare the young for future responsibilities and for success in life, by means of acquisition of the organized bodies of information and prepared forms of skill which comprehend the material of instruction. Since the subject-matter as well as standards of proper conduct are handed down from the past, the attitude of pupils must, upon the whole, be one of docility, receptivity, and obedience. Books, especially textbooks, are

the chief representatives of the lore and wisdom of the past, while teachers are the organs through which pupils are brought into effective connection with the material. Teachers are the agents through which knowledge and skills are communicated and rules of conduct enforced."[1]

He also wrote, "If one attempts to formulate the philosophy of education implicit in the practices of the newer education, we may, I think, discover certain common principles amid the variety of progressive schools now existing. To imposition from above is opposed expression and cultivation of individuality; to external discipline is opposed free activity; to learning from texts and teachers, learning through experience; to acquisition is isolated skills and techniques by drill, is opposed acquisition of them as means of attaining ends which make direct vital appeal; to preparation for a more or less remote future is opposed making the most of the opportunities of present life; to static aims and materials is opposed acquaintance with a changing world."[2]

In this paragraph, Dewey advocated a new education and opposed the traditional one. The distinction between the two was clear and easy to understand. But in the current discussion and literature, "traditional education" has various definitions. Some think that "traditional education" is the educational philosophy and system which have been accustomed to, spread far and wide, and commonly acknowledged; others believe that "traditional education" has dual meanings, it refers not only to what John Dewey defined as the "traditional education" but also to the educational philosophy and system which have been passed down through generations and commonly acknowledged to be opposite to the modern education. Of course, there are other opinions. Whatever the viewpoint, the key here is to get a clear understanding of the connotation and denotation of the "traditional education" which has been accustomed to, spread far and wide and commonly acknowledged. What educational philosophy does it embody? What major characteristics does its educational system possess? What should we inherit critically? What should we negate? How should we evaluate this "traditional education"? Due to the differences in viewpoints, "traditional education" may mean the same or opposite, or overlapping yet not totally identical things. Multi-definitions for one term could cause ideological confusion and produce practical difficulties in the current process of reforming the educational philosophy and transforming the educational ideas which do not suit socialist modernization. Therefore, to get a further understanding of the connotation, characteristics, merits and drawbacks of China's "traditional education" is significant both theoretically and practically. It will be helpful to the correct handling of the relationship between inheritance and innovation in the cause of the educational reform.

Learning vs. Creativeness

When the human society evolves into the stage of capitalism "due to the emergence of the world market, all the production and consumption in the nation becomes world-wide." "The local and national

self-sufficiency and self-enclosure to international exchange is replaced by the multi-lateral contacts and multi-lateral dependence in every aspect among all nations. Material production is like this, so is spiritual production." The educational philosophy and system are certainly no exception. In today's world, very few countries do not have international cultural and educational exchange. We all understand that without mutual exchange and learning, we could not broadly acquire good elements and derive rich nourishment from others. Consequently, our own education could not make full progress. However, learning is not indiscriminate copying. If we fail to base our learning on the realities of the country, or fail to deeply root education in the nation's soil, learning would not lead to satisfactory results, just as a flower will wither if it is transplanted in foreign soil by force. The sole purpose of learning from others is to create; to pave one's own path and to create one's own national characteristics. Looking at all the independent nations the world over, we find that their educational undertakings all have their own respective characteristics and unique styles even though they cannot deviate from the world trend of the educational development.

With regard to learning and creativeness, we have accumulated some experiences and learned some lessons from our own previous educational reforms.

In the 1950's, it was of certain historical inevitability that China carried out educational reform using the Soviet Union as the model. In July 1953, the National Conference of Engineering Institutions put forward the guiding policy for teaching reform, stating, "to learn the advanced experiences from the Soviet Union and to combine it with the realities of China." This policy was basically correct. However, it failed to incorporate the learning of useful experiences from the old education and from other countries. After 1954, it was stressed that "learning from the Soviet Union should be all-round systematic and whole-hearted," thus, drifting away from the correct course. The consequent indiscriminate copying from the Soviet Union of its educational philosophy, system, teaching materials, content, methods and organization showed that we lacked consciousness of being practical, realistic and creative. It was not until late 1956 that the mistake of being "dogmatic" was admitted and that measures were taken to turn the situation around. The Soviet educational model had strong influences on our educational reforms. It was thus necessary to reanalyze it in a historical and scientific way.

During the 1960's and 1970's, the "Cultural Revolution" brought us to the other extreme. The "Gang of Four" had too high an opinion of themselves; they blindly opposed everything foreign and closed the country to any international exchanges. In July 1970, in the article "Strive to Create Socialist Colleges and Universities of Science and Technology," written under the direction of Zhang Chun-qiao and Yao Wen-yuan, it was stated that "The crucial malice of the old system of teaching materials for colleges and universities of science and technology is the slavish comprador philosophy and creepism. They have contaminated every word of the teaching materials and are still the spiritual shackles of some intellectuals. Therefore, only by eradicating the slavish comprador philosophy and creepism can we

thoroughly reform the teaching materials." Consequently, catching up with the world's advanced level in science and technology was labelled as "creepism" and learning useful things from other countries was criticized as "slavish comprador philosophy." Under such a cultural tyranny and obscurant policy, intellectuals were afraid of discussing anything foreign, not to mention actually learning from other countries. The so-called "creations" claimed by the "Gang of Four," such as "organizing teaching around a particular project," "letters and diary of a school girl" and "Learning from Chaoyang Institute of Agriculture," were nothing but phrases picked up from someone else and taken by the "Gang of Four" as their own. They brought disaster to education in China.

Therefore, the correct handling of the relationship between learning and creativeness is another problem that the educational reform must deal with. Deng Xiao-ping pointed out, "Our modernization construction must start from the realities of China. Whether in revolution or in construction, we should always pay attention to learning from and using the experiences of others. However, indiscriminate copying never has been and never will be successful. We have learned a lot of lessons in this respect. From these lessons, we have reached a basic conclusion, i.e. we should combine the universal truth of Marxism with the realities of China, take our own path, and build socialism with Chinese characteristics." This statement not only pointed the way forward for China's modernization construction, but also handled correctly the relationship between learning from others and creating your own. At present, one of the important issues in the educational reform is how to absorb helpful nourishment from the advanced countries "so as to build our education upon the fruit of the world civilization." This issue can be solved in two steps. First, we need to systematically collect from advanced countries the literature on their educational reforms in recent years, understand their historic background and current situations in politics, economy, science and technology, and culture, and their impact on the educational reforms and analyze as well as study the common general trend in the reforms of basic education, vocational education, adult education and higher education in the advanced countries. Based on these studies, we should identify the helpful viewpoints, measures and lessons. For instance, some people believe that the motivating force for educational reforms in the advanced countries comes from the challenges of the world's new technology revolution and the international economic competition. These new challenges pose new requirements and new demands for the educational system, content and method. Thus they provide a basis for educational reform. Are these viewpoints right? Other people argue that the common trend of the educational reforms worldwide is to improve quality of education. Thus it is necessary to strengthen the primary and secondary education, improve vocational and technical education, encourage and develop life-long education, and tighten the link between educational institutions, production units, and research institutes. Are these viewpoints comprehensive and correct? All this needs to be explored further. Secondly, after clearing the understandings and viewpoints, we need to consider our own realities and distinguish the useful experiences and measure from the inappropriate ones. In short, we

should learn from others only what is appropriate to China and create our own path so as to push the reform of our educational system forward and gradually build up a socialist educational system with Chinese characteristics.

Incremental Change vs. Revolutionary Change

As a social phenomenon of training human talents, education is closely linked with other social activities, such as politics, economy, science and technology, and cultural tradition. Education is comprehensive. It is built upon the practical activities of philosophy, psychology, sociology, economics and many other disciplines. Education is also extensive. It enters millions of households, spreads to both urban and rural areas, and grows with people from infancy to adulthood. And finally, education is inheritable and continuable. It is the accumulation of human beings' long-time practical experiences. Even the educators in the feudal and capitalist societies have had rational elements in their educational practices. Because education has these unique characteristics, major reforms of education are inevitably complicated, protracted and arduous. In retrospect of the history, when one class overthrew another, or one social system replaced another, violent measures tended to be employed in political, military and economical realms. Consequently, sudden revolutionary changes would take place in a short time. However, in the field of education the situation was different. Although education would have fundamental changes after the fundamental change in the social system, the changes were the result of long-time incremental changes. In the absence of any fundamental changes in the social system, slow and incremental changes would occur more often. With changes in politics, economy, science and technology, and culture, education is developing and self-perfecting. Of course, such changes could be partially or totally revolutionary in nature; only that the revolutionary changes resulting from educational reforms are different from those that are brought about by the fundamental changes in the social system.

In retrospect of China's previous educational reforms, not counting the so called "Proletarian Educational Revolution" during the Cultural Revolution, some of the reforms did pay attention to the correct handling of the relationship between the incremental change and the revolutionary change, while others were over-anxious for quick results and adopted rough measures in forcing the changes in education. Consequently, the following problems often occurred:

A) Failure to handle carefully and appropriately the relationships between education and society, inheritance and innovation, learning and creation. The reforms were often one-sided, stressing one aspect while ignoring the other; or they were strongly vacillating, from one extreme to the other.

B) The methods used in reforming education violated the law of education. It often attempted to use the method of mass movements (such

as speaking out freely, airing views fully, holding great debates, and writing big-character-posters) to solve the problems in education. The results, however, were often contrary to the original intention.

C) Failure to respect some teachers' knowledge and experiences; failure to listen to their views and comments. Instead, rough measures were taken and teachers were treated as enemies, thus, greatly hurting their feelings and motivations.

Because of these problems, we not only failed to implement those reforms which had correct purposes and which could have achieved intended results after certain efforts, but also effectively slowed down or inhibited the progress of such reforms.

At present, the all-round reform and the policy of opening to the outside world have brought about a mighty vigor to China's socialist cause. Our society is developing and advancing. This gives a powerful impetus to the educational reform. In "The Decision of the Central Committee of the Chinese Communist Party on Reforming the Educational System," a guiding policy for education has been established which states: "Education must serve the socialist construction and the socialist construction must depend on education." The document also points out that the reform should concentrate on the problems in the delegation of administrative power, in the educational structure, and in the educational philosophy, content and methods. Meanwhile, it emphasizes that "reform in the educational system should be based on our own historical and current experiences, while due attention should be paid to learning the positive and negative experiences from other countries in their development of education." These policies are undoubtedly correct. With favorable conditions, correct policies and clear requirements, our educational reform is promising. However, because of the unique characteristics of education which we mentioned above, the current educational reform is still an incremental process. Sufficient incremental changes have to be accumulated before any revolutionary changes can take place.

In this article, I have explored a few of the issues concerning educational reform. I have concentrated on raising the questions that deserve pondering and not giving any answers. Other questions, such as the relationship between school education and societal practice, social demands and individual character development are also very important and require further study.

Footnotes

1. John Dewey, Experience and Education, McMillan, 1938, p. 3.

2. Ibid., p. 5-6.

Improve the Teaching Quality in the Popularization of Compulsory Education

Liu Fonian*

Today, nine-year compulsory education is beginning in China. It has an important bearing on our nation's future. To implement this program, two efforts should be made: one is to increase the quantity and the other is to improve the quality. We must work on these two areas at the same time, not only on the quantity, but also the quality. Otherwise, it will result in a major waste of the manpower and material resources. Many conditions are required to improve the quality, such as school buildings, facilities, teachers, curricula, teaching programs, and teaching materials. Among them, teacher quality is the most important. A teacher's educational ideology and abilities are the key factors in improving his teaching. We are not able to create all the required conditions such as facilities, teachers, teaching materials within a short period, and it might need a long period to improve to an expected standard. Can we just wait for all the conditions to ripen, and then carry on the teaching reform? No, because it would affect the training of a whole generation. It takes great efforts to create the conditions. For instance, without the implementation of teaching reform, the teacher can not enhance his quality just by reading books. Therefore, we should try every means to improve the quality of teaching given the existing teacher quality, facilities and teaching materials.

First of all, we must get rid of the prejudice that most students in the key schools are excellent, but only few students in ordinary schools are able and most of them are about average or even mediocre. With such an idea, a teacher would not make great efforts to improve the academic performance of all students. Experience in teaching reform both at home and abroad show that if a teacher is willing to try hard to improve his or her teaching method, he or she can gradually make most students achieve good results. If the teacher in an ordinary school is willing to reform, he or she must foster this conviction as a premise.

To have or not to have such a conviction makes a marked difference. Its impact on the morale of both the teacher and the student is great. We have often seen such a situation: if a teacher has no confidence in an individual student, this student would lose his or her will to make progress, and then get worse and worse in his or her learning. On the contrary, if a student feels that the teacher has confidence in him or her, the student will have the confidence to study and to make progress. We often say that every teacher should act as an educator. Good educators are not those who would flunk a large number of students before getting a handful of excellent students and leave them at the academic level they have already reached, but those who are able to raise the weak students from average or below-average levels to the level of excellence.

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To turn conviction into reality, one should work hard on every link in the chain of the teaching process so as to achieve good results in terms of teaching goals, teaching evaluations, teaching measurements.

Clear goals are essential to every aspect to our work: when teachers are forming their own goals in teaching, they should take into consideration the government's general aims and objectives in education, and at the same time, the specific aims and objectives of the general schools. The requirements for moral, intellectual, physical, aesthetic, and labor education are stipulated at both the macro- and the micro-levels. The actual teaching aims and objectives in various subjects are formulated based on these requirements. Only on this basis can we set a specific teaching aim for a particular subject. Generally speaking, the teaching aim should indicate certain knowledge that students must acquire and understand. It includes important facts, concepts, principles, required skills for some disciplines, creativity, and the ability to use facts and principles to analyze and solve problems. Moreover, the aim should indicate how to help students cultivate the correct attitudes toward their studies, foster their interests, self-confidence, diligence and soicalist ideology. When deciding their teaching aims, teachers are likely to pay more attention to the knowledge which should be mastered rather than to the abilities and attitudes toward studies. As to every teaching unit within a subject, its aim should be defined even more specifically; that is, it should take into account the actual conditions of each school. Only with such clear and specified aims can our teaching be guided effectively. The teaching aim must be understood not only by teachers, but also by students who will not be so motivated to study unless they have a clear understanding of the aims of their study and the specific academic standards expected.

Once the teaching aims are defined, teachers must teach accordingly and make sure that these aims are realized through his students' performance. In the past, some teachers failed to achieve the aims which had been so specifically defined. Actually, teachers are less oriented by a fixed aim than by the pressure from the entrance examinations for higher levels of schools. If the examination puts an emphasis on rote, then teachers would make their efforts to proceed in this direction. So it is said that the entrance examination is a "baton" for teaching. It would be completely useless to define specific teaching aims so long as such a problem on educational ideology is not solved. Teaching aims should be combined with evaluation. It can be considered as a good result when it accords with the demands of evaluation. Otherwise, it can't be considered as a good result even if students are able to enter the higher levels of schools. Therefore, the teachers who are reforming teaching must set the examination questions strictly according to the teaching aims, and both the scope and depth of the examination questions should be suited to the requirements of the teaching aims. We should constantly improve our methods of educational measurement to make them more scientific. The methods of measurement should be diversified. Only with varied methods can we measure and evaluate the achievements in various subjects. At the same time, we must solve the problems with the entrance examinations. The exam

questions should be set strictly according to the general goals of education decided by the central authorities and the teaching aims of various subjects, so that they can be integrated more closely with educational activities that are conducted following the teaching aims.

Once the problems with education aims and evaluation are solved, it is easier to improve the teaching methods. If close attention is paid to the aims and evaluation, the teachers would be impelled to improve their teaching methods. These methods constitute the middle link in the chain of teaching activities. How to improve the teaching methods is a big topic. There are many practices and experiences both at home and abroad. But the application of particular methods is related to many conditions. Those methods which suit the key schools may not be suitable to the ordinary schools. For example, computer-assisted teaching might be adopted by the key schools within ten or twelve years, but it may not be possible for the ordinary primary and secondary schools. Therefore, I would suggest several methods which might be tried out in the ordinary primary and secondary schools in our country.

Firstly, feedback and remedy can be utilized. By function, evaluation can be divided into two kinds. One is through examination. A student's scores and grades are given at the end of a certain subject. As a result, whether the student can proceed to a higher level of school or to a higher grade can be decided. The other function is to give a "diagnostic" test without grades as soon as a certain part of the subject matter is completed to find out what knowledge and skills students have grasped. Upon obtaining the feedback information, the teacher could immediately give remedies by him- or herself or through student groups, to enable the students to have a real grasp of the subject. When they have passed, they can take up the next unit. Based on the experiences both at home and abroad, such a method would enable the majority of the students to achieve well. Many students who were previously low-achievers have raised their academic standards as a result, their confidence in their study has been strengthened, and their interests in the subject aroused. Thus, they become diligent students. Such a case would change the view many teachers have about the low-achievers. The results would be much better if students are given a test on the knowledge learned which is related to the new subject to be taught and are given necessary remedies on the basis of the feedback. Some teachers try to get feedback and give immediate remedies by using questions-and-answers and exercises in every class, and their results are satisfactory. It is not very difficult for most teachers to employ this method in their teaching.

Secondly, there is a problem of correctly handling the relationship between teaching all students in a class as a whole and teaching students according to their aptitudes. We often see that quite a few teachers pay attention only on a few outstanding students in the class and orient their teaching to them. These students are given the most opportunities to answer questions, do exercises, express their opinions, and get encouragement. But the students who are about average or below do not have these chances. Thus, good students are getting better and better while the weak students are getting worse and worse. If enough

attention is paid to this problem, teaching will encompass all the students in the class as a whole. Different questions and tasks should be raised to suit different levels of students, enabling each of them to have chances to take part in the teaching-learning activities. Consequently, certain success and encouragement would be enjoyed by everyone. Then most students of average abilities or below would gradually improve their performances, and would soon be up to a higher level. This has been proven by experiences both at home and abroad. Noticing this problem, and being reminded by colleagues and students, a teacher can have more and equitable interactions with all students.

Thirdly, the initiatives of both teachers and students need to be brought into full play. In order to help students understand difficult but important concepts and principles, teachers need to stimulate the students' own initiatives. But by depending totally on teacher's explanation in class, students' initiatives and abilities are not brought into full play. Actually, so long as the question and study-task given by the teacher has a certain degree of difficulty and challenge, and the students are asked to think hard and deal with them, their initiatives in exploration would be fully stimulated. The teacher's task is to inspire, guide and help, rather than to substitute for the students' exploration and thinking. Every problem that students could deal with should be left for them to solve by themselves. If teachers pay attention to these concepts, it would be possible for students to find a way to gain more interest in and ability to study, and to do well in their coursework. Certainly, this is not easy to do, but so long as teachers are knowledgeable with the subject matter, familiar with several teaching methods, and courageous in using these methods, they can succeed in bringing out the students' initiatives. Teachers should be encouraged when they have done a good job in their teaching; and students, especially those of average abilities or below, should be encouraged, too, when their abilities to study and think independently have developed, their interests in study has been aroused, and their progress in studies has been made. No doubt, such encouragement could further stimulate the initiative of both teachers and students.

Finally, school education, family education and societal education must be combined. Whether the teacher-student relationship in the school is close is an important factor for student initiatives. It is important, too, that students teach and help each other in activities both in and out of class. Families have profound influences on the children at the preschool, elementary, and even secondary school stages. Teachers should know the methods of family education, and have regular contacts with the parents. They should discuss with the parents how it is possible for the family to help the child cultivate good learning habits, to provide favorable study environment, to help him deal with difficulties in studies, to award the child for his good behaviors, and to set reasonable expectations of him. The performance of elementary students would be raised greatly when these efforts are well made. Societal education, such as the educational TV programs and activities in the Children's Palace, has great influence on the students. It is no doubt that the students' performance would be greatly raised if school education is combined with the family and societal education.

What I mentioned above has by no means exhausted all the good methods which may suit the ordinary schools. Although both American professor Broom and his followers, and the Gu Ling-yuan Mathematics-Teaching Group of Qingpu county in China have experiences in this field, we have to try them out before they are popularized. The major reason why I mentioned those is not necessarily to popularize their specific methods, but to explain that it is not extremely difficult or powerless to improve the teaching quality. So long as our teachers are realistic, pay close attention to students' conditions of learning and ideology, pay real attention to studying and improving teaching methods, and suit the remedy to the case, some good teaching methods would surely be found. It is obvious that to enhance the standards of teaching, many things are required to be done; and to do a better job, teachers are required to improve their own cultural accomplishment and ideology, to raise their own academic level and to develop their own teaching abilities. This is an arduous and protracted task which we have to make great efforts to fulfill. But we can certainly reach this goal step by step, so long as we base ourselves on the existing conditions and make a start right now. We should have the confidence.

Primary and Secondary Education in Rural Areas

Xu Lin

At present, China has over 3,500 towns and more than 53,000 market-towns. They scatter all over like stars in the sky between cities and the countryside, playing a natural pivotal role of linking up the urban and rural areas. In recent years, towns throughout the country have been developing rapidly. Although the development varies from one town to another, it finds similar characteristics in all: town enterprises have experienced increases in capital accumulation, the towns themselves have experienced not only growth in population but also a rapid change from the so-called consumer, commercial, or mere collecting and distributing centers for agricultural and side-line products to productive centers with simultaneous development in both industry and commerce. Such a new development has not only made the towns play a particularly important role in developing the rural economy, in absorbing the surplus labor force, and in bringing about a balanced advance in both the urban and rural areas, it has also given a powerful impetus to cultural and educational undertakings in the rural areas. In particular, its impact on the rural primary and secondary education has attracted our educators' attention.

Then, what favorable conditions does the town development provide to the primary and secondary education in the rural areas? At the same time, what kinds of new contradictions and problems has it brought about? How should the primary and secondary education be reformed so as to meet the needs of the town development and the entire economic development in the rural areas? This article tries to approach these issues by citing the example of Jiangsu Province.

(1) The New Resources of the Rural Primary and Secondary Education and the New Motivations for Improving the Quality of Education

To run schools need resources; that is, the provision of certain human, material and financial resources should be ensured. However, for quite a long time, the provision of resources for primary and secondary schools in the rural areas have been insufficient. In recent years, the prosperity of towns, the increases in their capital, the growth of their population, and their increasing needs for higher quality population have provided new resources for the rural primary and secondary schools and given them new motivation for improving the quality of education.

As the town economy develops, the financial resources of the town and its enterprises increase. This provides the necessary material for improving the conditions in primary and secondary schools and for implementing, step by step, the nine-year compulsory education program.

In Jiangsu Province, there are 149 towns under the jurisdiction of counties and 1,948 market-towns. By the end of 1984, the number of town enterprises had reached 83,903 with a total annual output value of 26,375.2 million yuan, accounting for 27% of the total output value of both industry and agriculture of the province and 39% of the total

industrial output value of the province. There were 66 counties which have a total annual income of more than 50 million yuan and 647 towns whose total annual income has reached of over 10 million yuan. Thus, the large increases in the local annual income, in the capital accumulation in town enterprises, and in individual income have made it possible to collect funds for schools. Jiangsu Province has made full use of this possibility in a timely manner. As a result, the local enthusiasm for education has been mobilized, money for education has been raised from various sources, and conditions of the schools have been improved. From 1981 to the beginning of 1985, the province raised 562 million yuan specifically for education, of which 231 million yuan was collected from the town collectives and individuals. Within the province, in those towns where economy is prosperous and development is comparatively fast, the conditions for school and the living standard of teachers and school administrators have been substantially improved. In Wuxi County, which is highly spoken of, teachers in both public and people-run schools are well paid. This is inseparable from the fact that the total industrial output value of the county is ahead of all other counties in China. In Changshu County, rapid economic development has enabled the country government to provide a 8.431-million-yuan budget for cultural and educational undertakings in its towns.

It is not difficult to predict that in implementing "The Decision on Reforming the Educational System Made by the Central Committee of the Chinese Communist Party" and with the delegation of the responsibility for developing primary and secondary education to the local governments, the relationship between the local economy and the development of the local primary and secondary education will be even more interrelated.

With the growth of population in rural towns, there is a tendency for the scale of the local primary and secondary education to expand steadily.

In China, most of the town enterprises have developed on the basis of the established rural towns and market-towns. Large numbers of surplus labor have been absorbed into the town enterprises, leading to the increase in the quantity and the changes in the structure of the town population. At present, 20% of the population in China work and live in towns. The town residents increased from 41.82 million in 1979 to 62.15 million in 1982. By 1984, in Jiangsu Province, for example, the number of workers and staff members of town enterprises had reached 5,414,880 and the labor force which had migrated into towns from all trades and professions reached 9 million. They accounted for about 35% of the total labor force in the province. The growth of the town residents has led to the increase in the scale of the primary and secondary education in towns. At present, there are 2,300 comprehensive secondary schools in Jiangsu Province, which makes up over 40% of the total number of comprehensive secondary schools in the province. In some newly-built towns, a number of new primary and junior high schools have been set up. Thus, the primary and secondary schools witness an unprecedented prosperity rather than a decrease in the source of pupils due to the implementation of family planning.

The development of towns sets higher demands for the quality of their residents, thus giving an impetus to improving the quality of the primary and secondary education in the rural areas.

The increasing modernization of industrial production in the town enterprises and the popularization of modern science and technology in all trades and professions have made employers set higher standards on the recruits in terms of their educational level. Now, in most areas of Jiangsu Province, the standards set for recruits into town enterprises is higher than junior high education, while in some of the developed areas in the southern part of the province, the standard is as high as graduation from senior high school. In addition, the town enterprises have paid close attention to offering remedial instruction to the existing workers. The fact that employment may not be possible for anybody without certification of junior or even senior high school forces parents to demand strongly the provision of junior or even senior high school education for their children. Pupils themselves also understand that their future could be negatively affected unless they receive a junior or senior high school education. This situation urges pupils to study hard, to get a good command of the knowledge of science and technology, and to achieve greater successes in their studies. At the same time, it pushes schools to improve their material conditions for teaching, to manage well, and to enhance the quality of education. In short, the higher demand for the labor force has given the primary and secondary schools in the rural areas the impetus to improve the quality of education. In terms of the different geographic areas, the quality of the primary and secondary education in those rural areas where the economy is more developed and the standard set for the recruits into the town enterprises is higher would be higher than their counterparts in the areas where the economy is less developed. As for Jiangsu Province, the quality of primary and secondary education in the rural areas in the southern part of the province where the economy is more developed, is relatively higher than that of their counterparts in the less developed northern part of the province.

(2) The New Contradictions Facing the Primary and Secondary Schools and the New Problems Which Urgently Need to Be Solved

As mentioned previously, the development of towns has provided abundant human nd material resources for improving the primary and secondary schools in the rural areas and created many desirable conditions for their further development. However, simultaneously, it has set many new demands on them in terms of their scale and distribution, the structure of education, the structure of knowledge and the ideological quality of the pupils. Yet, up to now, most of the primary and secondary schools in the rural areas have not satisfied these needs, thus the contradiction between the development of towns and the present situation of the primary and secondary education in the rural areas has appeared. The major problems are as follows:

(A) The problem of "surplus source of pupils" in towns.

In recent years, more and more new pupils have been enrolled and more and more students have transferred to the primary and secondary schools in towns. The teachers of these schools said: "The enclosing wall of our schools would be broken unless there is a way out."

What is the reason for the problem of "surplus of source of pupils"? How serious is the contradiction and what is the trend of its development? Our studies indicate that, first, the peasants who have been employed by the town enterprises urgently demand the admissions of their children to the schools in town.

In recent years, hundreds of thousands of the surplus labor force in the rural areas have migrated to the enterprises run by production brigades and communes and to the town enterprises. Along with the vigorous development of the town enterprises and the enhancement of the agricultural productivity, many of those who migrated into towns have become permanent residents. Once they settle down in towns, it is undoubtedly logical that they demand the admissions of their children to the schools in towns. In the early summer of 1985, the author studied the situation in the Town of Sancang in Dongtai County, which is at the middle level of development in Jiangsu Province. From October 13, 1984 when "Notice on how peasants settle down in market towns" was issued by the State Council to April 1985, there were 5,125 workers and staff members of the town enterprises who settled down in the Town of Sancang, and 81% of their children demanded admissions to the schools in the town. With respect to the current situation, there are 522 pupils who urgently demand transfer to the primary and secondary schools and kindergartens in the Town of Sancang from the village schools. Of the 522, 115 attend junior high school, 192 are primary school pupils, and 245 are children in kindergarten. However, Sancang Primary School and Sancang Middle School, owing to their limited scope, facilities and the rules and regulations on the management of schools set by the government, cannot accept these pupils. Consequently, though they have settled down in the town with their parents, the problem of being enrolled in the schools there has not been solved and they are still excluded from these schools. Thus, the sharp contradiction between students and parents on one side and the schools on the other has appeared in terms of enrollment and transfer.

With respect to the future trend of development, this contradiction would necessarily become sharper day by day unless the scope of town schools is expanded and the regulations on the management of school rolls are reformed. If the Town of Sancang could be used as the miniature of the country, it is not difficult to calculate that there are about 2.5 million pupils who demand transfer to the primary and secondary schools in towns. Although this figure is not accurate, it does indicate the sharpness of the contradiction and the urgency of the problem.

Secondly, those peasants who have become well-to-do demand the enrollment of their children in the schools which are better equipped.

Along with the improvement of the economy in the rural areas and the increase in the income of the peasants, they strongly demand improvement and enrichment of their cultural life and provision of desirable education for their children. Compared with their counterparts in village, the quality of teachers in the primary and secondary schools in towns is higher, their facilities for teaching are more complete, their management is more regulated, and their quality of teaching is more satisfactory. Therefore, those well-to-do peasants would try every means to send their children to the town schools.

(B) The problem that the knowledge structure of graduates from junior and senior high schools has not been modified to suit the changes in the industrial structure in towns.

The experience of the town development tells us that the improvement of economy in towns depends on the quality of qualified human talents. According to statistics, of the 40 million skilled workers all over the country, young workers with lower than the third grade amount to about 70%. However, technical competence of the workers in the town enterprises is much lower than the national average. Where, then, do qualified personnel come from? The fundamental way is to develop local education, especially to pay attention to vocational and technical education. However, rural middle schools, as the major base for training qualified personnel for towns, have neglected vocational and technical education for a long time. As a result, the structure of secondary education has been unitary and every effort has been made to prepare their students only for entering institutions of higher education. Every year, among graduates from senior high schools, only a small part can enter higher schools while most of them cannot. Due to the unitary knowledge structure and the lack of professional techniques, the high school graduates, after returning to the villages, often fail to use what they have learned in school. Thus, it is difficult for them to function properly and serve the needs of the town development and the needs of the multi-industrial structure. Generally, after entering the town enterprises, these junior or senior high school graduates have to receive remedial instruction and specialized technical training. This duplicate education has caused serious wastage of funds for education. The town enterprises, because of their urgent needs for qualified personnel, strongly demand that the structure of secondary education be reformed as soon as possible, that the proportion of students in vocational programs among the total enrollment be increased, and that the quality of teaching in the primary and secondary schools be improved. In order to resolve this contradiction, Jiangsu Province, according to the instructions given by the central government, has been reforming the structure of its secondary education since 1979. Since 1981, the new students of agricultural and vocational middle schools have increased at an average rate of 10,000 a year and the enrollment in schools of this kind has increased at an average rate of 30,000 a year.

However, this growth has not satisfied the needs of economic development in the rural areas and the construction of towns.

(C) The problem of reluctance of the graduates from secondary schools in the rural areas to return to farm work in their home villages.

In recent years, commodity economy in the rural areas has developed rapidly and the town enterprises are like a new force suddenly coming to the scene. A new industrial structure is being formed, which has offered graduates from junior and senior high schools in the rural areas more choices. However, at the same time, the problem has appeared: most graduates from secondary schools prefer being employed by the town enterprises rather than returning to farming in their home villages.

We have studied a sample of the recent graduates from the rural secondary schools in Jiangsu Province and found that since 1981 in some townships, none of the graduates from senior high school have returned to farms and only a few graduates from junior high school have returned to farms.

We did a survey study among 524 1985-graduates from some senior high schools under the jurisdiction of Nanjing, Zhanjiang and Yiancheng. The study indicates that 71 graduates estimated that they were sure they could be admitted to colleges and universities in the same year, which amounts to 13.5% of the total; 201 were planning to find employment in the town enterprises, which amounts to 38.4%; 48 were going to set up factories, to run businesses or to become sideline production households, which amounts to 9.2%; 34 were going to join the army, which amounts to 6.5%; 78 were planning to review their lessons and to sit for the university entrance examination next year, which amounts to 14.8%; 33 had no definite intention, which amounts to 6.3%; 37 were planning to find other employment, which amounts to 7.1%; and only 22 were planning to return to farm work in their home villages, which amounts to 4.2%.

To realize the modernization of agriculture, we need a great number of qualified personnel who love agricultural production and possess the knowledge of science and technology. At present, there are so few graduates from secondary schools in the rural areas who are willing to return to farm work in their home villages that it has become a new imbalance between qualified personnel and the distribution of the labor force. Unless it is brought to the attention of all walks of life as early as possible and appropriate measures are taken, this problem will undoubtedly endanger the harmonious development of economy in the rural areas and in turn, hinder the development of local education.

(3) To see clearly the inexorable trend, and to reform primary and secondary education in the rural areas so as to serve the economic construction more efficiently.

The town development is an important component in the construction of the Chinese-styled socialism, rather than an expedient measure. The impact made by the construction of towns on primary and secondary education in the rural areas in terms of the conditions of schools, the scope of education, educational structure, the quality of teaching and pupils' consciousness of employment is of a long-term and nationwide significance, rather than a temporary and local one. We should see clearly the inexorable trend, and resolutely reform primary and secondary education in the rural areas, so as to satisfy the needs of the town development and those of all other rural areas and adapt to the situation of the national reforms.

(A) Make rational use of educational funds, readjust the distribution and scope of schools in the rural areas, and expand the scope of primary and secondary schools in towns.

According to an estimate made by some specialists, by the end of the century, there will be a 15 to 20 million labor surplus in Jiangsu Province and 300 million labor surplus all over the country. This surplus labor force will dissociate themselves from farming and most of them will enter towns. Consequently, town residents will increase continuously. That means the existing problem of "surplus source of pupils" in the town primary and secondary schools will become even more serious unless it can be solved appropriately. How to solve this contradiction? The answer: adapt to the trend of history, reform the rules and regulations on the management of school enrollment, and permit children of the workers and staff members of the town enterprises who have permanent residence status to transfer to the town primary and secondary schools. Therefore, it needs to increase, step by step, the funds for education in the town primary and secondary schools, so that their scope may be expanded, more teachers may be recruited, and more facilities may be purchased. Where do the educational funds come from? Fundamentally, we should carry out the policy of "walking on two legs," which means that the state investment should be increased annually, while, at the same time, the enthusiasm of the localities, collectives and individuals to run the schools should be fully mobilized. In addition, we may readjust the input priorities and input proportion, because, on the premise of constant per capita funds for education, the input of the funds for education should increase along with the increase in population and it should decrease along with the decrease in population. The funds for the town primary and secondary schools should increase along with the growth of town population. In order not to impair the primary and junior high education in the rural areas, and considering that in these schools there is a general insufficiency of pupils, we may readjust their distribution and scope, i.e., a junior primary school which has 1 to 2 or 1 to 3 grades should be reserved in each village while senior primary schools should be consolidated appropriately. In recent years, quite a few areas in Jiangsu Province

have successfully merged and consolidated senior primary schools. Practice has proven that it is advantageous to reallocate teachers in accordance with the authorized size, to create and give play to teaching superiority, to decrease per capita funds for education, and to improve the quality of teaching.

(B) Take effective measures and speed up the pace of the reforms of the structure of the secondary education in the rural areas.

Due to the changes in the economic structure in the rural areas, the readjustment of the industrial structure, the rise of towns, a large contingent of skilled labor with good vocational and technical education is urgently needed. Therefore, the emphasis of the reform in the structure of the secondary education in rural areas is on the development of vocational and technical education and on the increase in the proportion of agricultural and technical middle schools in the entire secondary education. At present, this reform has been launched nationally, but, it will be hindered from going smoothly unless the following problems are solved.

First, the problem of understanding. At present, the pace of the reform in the structure of secondary education in the rural areas is slower than that of town development and it is not able to satisfy the needs of the entire economic development. Except the material factor, an important factor is that it has not been adequately understood in the society. While making an investigation on a number of cities and counties, we found that the reform in the structure of the secondary education had not gotten powerful support from the society as a whole. In some counties, when the school and the joint sponsor units were needed to sign a contract, the joint sponsor units tended to be reluctant both to sign and to offer funds. In other counties, though various units joined together and formed the leading group responsible for the reform in the structure of the secondary education, the key persons in charge of various departments refused to attend the meetings. Consequently, no decisions could be carried out. The significance of the reform in the structure of the secondary education should be propagated among the whole Party and the society as a whole, so that everyone cares about education and is willing to spend money on vocational and technical education.

Second, the problem of the system. In order to implement the principle of "training first, employment second," the reform in the educational system and the reform in the relevant rules and regulations of the labor and personnel system must be synchronized. The problem is that the principle mentioned above applies only to registered permanent town residents, not to those who live in towns without permanent resident status, let along those youth living in the vast rural areas. This situation has made it extremely difficult to give appropriate job assignments to the graduates from agricultural-vocational schools. For instance, in 1984, 22 graduates from the Baozao silkworm and mulberry special program without the registered permanent residence status in town did an internship in a silkworm and mulberry farm. They were well

received and the farm would like to hire them. However, they could not be employed even though they had specialized knowledge of the subject. Consequently, the farm had to hire 85 greenhands and start training programs all over again, a waste of personnel and educational resources.

Third, the problem of the organizational structure. The key to the reform in the educational structure is to make the proportion of various kinds of schools at different levels and offering different specialized subjects satisfy the needs of the industrial and technical structures. Therefore, the reform in the educational structure should be carried on continuously, so as to meet the requirements of the labor force by all trades and professions during different periods. Thus, special agencies should be established to forecast the requirements for the labor force so as to provide a basis for formulating appropriate educational plans which tallies with the actual situation. Up to now, most of the counties do not have general forecasting agencies of this kind and the department of education alone is unable to conduct this kind of forecasting. As a result, when the proportion of various kinds of schools at different levels and of the course offerings on specialized subjects are decided on annually, it is very difficult to avoid acting blindly. The inevitable outcome is either "structural unemployment" or the lack of technical personnel in certain professions. Thus, the establishment of a joint forecasting agency studying the labor force and training of people with professional skills in this field is an important task.

(C) Reform the ideological and political work in the primary and secondary schools in the rural areas, strengthen the education of "loving the countryside," and strengthen vocational counseling.

The author holds that the main reason for the graduates from secondary schools in the rural areas to be reluctant to return to farm work in their home villages is not more or less income, but a problem of social psychology and the social consciousness. The most decisive factor is the evaluation given by society to the occupation. In many cases, the income of those who are employed in the town enterprises is less than that of those who do farm work in their home villages, but the graduates and their parents believe that to do farm work in their home villages is spineless and sterile, yet, to be employed by the town enterprises, though the income is less, is more respectable. We should reform and strengthen the ideological and political work in the primary and secondary schools in the rural areas, so that it can adapt to the new situation and satisfy the new needs of the town development and the economic development of the entire rural areas. First, the education of "loving the countryside and farm work" should be carried on and the bright future of the socialist agriculture should be frequently explained to the pupils in view of the fact that many pupils are disgusted with the countryside and farm work. The mass of student youth should be educated to conscientiously resist various incorrect evaluations and comments on the occupations and change the prejudice from the old society of degrading peasants and manual labor.

Naturally, the work done by schools is insufficient; and the correct evaluation of all kinds of occupations and the cooperation of the society and families are needed. Secondly, because graduates from the secondary schools do not have an intimate understanding of many rising industries in towns, as a result, they often choose their occupations blindly. So pre-employment counseling should be strengthened and should be treated as an important component of the ideological and political work of the secondary schools in the rural areas. In the schools where necessary conditions exist, vocational counseling should be established and someone should be put in charge of the work.

The Overall Structure of School Activities

Jiang Shanye

For a long time we have been emphasizing development of individuals in an all-round way--morally, intellectually and physically. But, we have failed to fully implement this policy in school education. The students' load is too heavy; as a result, their health is impaired and their development in an all-round way is hampered. This problem has not only remained unsolved, but it has become ever more serious in recent years.

Why? The reasons are varied, of course. Some would point out that the most fundamental reason for it is the educational ideology. But we have stressed correcting the educational ideology for many year, why have we not been able to correct it?

In my opinion, educational ideology is not something empty; rather it is an inseparable part of the schools' actual activities. To implement a certain educational ideology or policy, we must arrange a set of relative educational activities that embody the ideology or policy. Moreover, we have to provide specific stipulations and arrangements for the activities to guarantee the implementation. Otherwise, the educational ideology or policy would not be well implemented.

What activities, then, should the school education be composed of? What is the position and role of each activity in school education? And what is the requirement of each activity? This is a matter of the overall structure of a school's educational activities. This article focuses on providing some opinions in this aspect.

1. The Position and Role of the Activity in Human Growth and Social Developments

It is commonly believed that food and drink are the first need of a human being. In fact, activity is the first need of the life of a human being. "Life depends on movement" has been a well-known saying. But, people usually mean sport activities or physical activities when they cite this well-known saying. Life, however, depends not only on sports activities or physical activities, but also on mental or intellectual activities. Without mental or intellectual activities, there will be no human life.

Actually, a baby starts his unceasing activities from the very beginning of his life and constantly widens the scope of his activities. If you try to limit or fetter his activities, he would cry and struggle; if he is freed from the fetters, he would show extraordinary activeness and joy. The struggle for freedom and activity, and the joy for gaining free activity fully indicate his need and desire for activities. They also indicate a basic principle: "The human nature is active when he is born." This nature, and the struggle and joy exist not only in one's infancy but also throughout his whole life from childhood, early

adolescence, adolescence, to adulthood. It is only that the activity takes up different features in each period. Baby's dance of joy when his swaddling clothes are untied, and pupils' yelling and rushing out of the classroom when the class is over are only two obvious examples. The different manifestations at different stages of life indicate that ever since infancy the demand for activity develops, widens, and diversifies constantly. Besides, their bodies grow in activities, and their knowledge, abilities and ideas develop in activities.

Meanwhile, the human society also develops, and can only develop in activities. It does not need any proof. Without productive activities, the human race cannot survive and the society cannot develop. Furthermore, the activities of the human society have not been limited to productive activities or a certain single activity ever since the remote ancient times. Singing and dancing exited from the primitive society, so did other cultural and social activities. Along with the development of the society, the activities of the human society become richer, more diversified and colorful. The human knowledge of science and technology, the human wisdom, ability, emotion and morality, and many other ideas are all developed in these various activities. Without these various activities, the human wisdom, ability and culture could not be so developed today, and the human thinking and emotion could not be so rich today.

Since activity is so important in human and societal development, we need to pay more attention to studying and understanding its position and role in school education.

2. The Position and the Role of Activities in School Education

The position and the role of activities in school education can be observed from the following two aspects.

First, they are closely related to the tasks and goals of school education.

Actually, there are different viewpoints concerning the tasks and goals of school education.

One such viewpoint holds that school is a place for learning and schooling is a specific learning period for students. Therefore, the main task for students is to take various courses the schools offers and all other activities are thus considered irrelevant. This is one kind of educational ideology. Guided by this ideology, all activities other than curriculum--learning are non-essential or even "illegal".

Of course, curriculum--learning is very important, and learning activity is a unique and intelligent activity of the human race. And no doubt, school is a place for learning and schooling is a specific period of learning for students.

But, it would be too narrow and one-sided to limit learning to only curriculum learning. A school is not only a place for curriculum learning, but also for fostering individual characteristics. The goal of the school is to develop students in an all-round way and to develop their personal characteristics and special skills. In regard to developing students in an all-round way, we need to consider the following ways.

First, the aspect of physical education. How to ensure our students to grow healthy and to develop a penchant for sports and good habits of physical exercises? Obviously all this requires sufficient sports activities. Without sufficient, regular and varied sports activities, these goals could not be reached.

Secondly, the aspect of moral education. How to ensure that our students have good morality in terms of keeping actions with promises? Obviously, it is not enough to depend only on classroom instruction and examinations, because morality is both a social and practical issue. In practice, one's moral ideas, moral behaviors and moral character are developed in the interaction with others, and are examined, evaluated, and improved constantly in the activities. Classroom teaching can play a guiding role only when it is combined with various practical activities. So moral education can be effective only through various activities.

Aesthetic education too, can only be done through various activities, such as recreation, art, music, travel, visiting, exhibition and festival celebrations.

In terms of labor and technical education, the necessity and importance of practical activities are too obvious to mention.

Finally, it needs to be pointed out that intellectual education cannot develop without various activities either. This is because (a) classroom-teaching will enable students to learn better and more enthusiastically only when it is combined with practical activities; (b) students' knowledge can be expanded through various activities besides classroom-teaching; and (c) activities have a special function in developing students' intelligence, ability, and creativity. Now, certain attention has been paid in this regard in the teaching of every single subject. But generally speaking, we cannot develop students' intelligence, ability and creativity through teaching activities in each separate subject, since intelligence, ability or creativity are not something unitary, but is a flexible utilization of various kinds of knowledge and skills. Only through various activities can it be tempered, brought into full play, expressed and fully developed.

Thus, it can be seen that only through various activities could students develop in an all-round way; and only in various activities could their intelligence, ability and creativity be well developed.

Furthermore, it is worth pointing out that many activities have multi-faceted educational significance. For example, physical education bears significance on moral education and aesthetic education, and plays an important role in the development of one's will-power and disposition. Moreover, physical education and labor and technical education supplement each other. Art activities, for another example, have the function of intellectual education and moral education. They are good for one's health, and also relevant to labor and technical education. Musical activities as well as science and technical activities perform many educational functions too. And some "mini-activities" also have very rich contents and educational meanings. For example, stamp collecting can enable students to have the knowledge of the world geography, history, culture, and science, to have art appreciation, and to learn some scientific and systematic thinking and working methods through collecting, classifying and sorting stamps. So, education through activities could often "kill many birds with one stone."

Moreover, extracurricular activities can perform some special functions that classroom-teaching cannot. For example, to develop students' practical abilities such as the ability of organizing, social intercourse and problem-handling. It is very important in fostering talents that are needed in practical work.

We can see that activities are an important position to fulfill the task and to realize the goal of school education. It is not only an indispensable, but also a favorable method or means of education. If a school offers only classroom-teaching without various activities, it would be an incomplete, one-sided education by which the educational task and goal could never be realized.

The position and the role of activities in school education are closely related with the regular patterns and demands of students' mental and physical development.

As mentioned above, "the human nature is active when he is born." Without activity, one will die; when activity in certain aspects stops, one could lose the function of this aspect; if one has only a unitary activity, one could grow to have a lopsided development. This is the rule.

Here we should particularly point out that children and adolescents who are in their growth period need a great deal of various activities. This is the most important feature of their mental and physical development, since their bodies develop in, and only in activities. In this growth period, there is an inner motivating force for activities. The faster their bodies develop, the stronger their desire for activities will be. The more ample and proper activities they get, the healthier they will develop, the healthier they will be and the greater and stronger their desire for activities will be.

In addition, their rapid development not only enables their bodies to be in an active state, but also enables their intelligence to be in an active state. Like their physical development, their intellectual development needs activities, and seeks every opportunity for activities. Classroom-teaching alone will not meet their need for intellectual activities. When the classroom teaching is dull, their desire for intellectual activities could even be depressed. So, students like to play and joke; they like riddles, exploration, detective stories and various other intellectual stimulation. They are especially fond of sports, just because many kinds of sports are at the same time intellectual activities. All of these are expressions of their need for constant intellectual activities.

More importantly, the period from childhood to youth is a period of constant increase and development of one's ability for activities. Of course, the ability itself is an impetus to stimulate activities, and the new ability is an even stronger impetus for more activities. Children, adolescents, and youth often have some newly obtained abilities; therefore, their desire for activities is much stronger. They want to test their abilities, to show their abilities, to prove their abilities, and to furthermore improve and develop their abilities. Along with the increase and development of their abilities, they always seek new activities, and expand the field and range of their activities. They want to go to various places, and to do various activities. They want to see and try whatever is new to them. They might be fond of many different activities at the same time. Or, they frequently change their minds, choosing one activity one day and change to another the next day. Some adults would blame them for "lacking perserverance" or "wanting to do everything but can do nothing well." Actually, this is a normal phenomenon. It is characteristic of this period that students need to try various activities. And precisely by doing so students may eventually gain multi-sided development and build a relatively all-round foundation for versatility. Based on this foundation, they can test themselves in many ways, develop their strong points, decide the direction for their own development, and well develop their personality.

In short, the various activities are both the need for realizing the goal of school education and the students' natural demand for physical and mental development. School education without various activities would not be in line with the educational goal and the objective law of the physical and mental development of the students. When that happens, we would not only fail to foster the students we need, but also depress and harm their physical and mental development.

3. The Basic Components of the Overall Structure of A School's Educational Activities

To have a variety of activities at school is a complicated matter which would affect the overall situation of school education. We can neither emphasize only one aspect at the expense of neglecting the other, nor can we go from one extreme to the other. We had such lessons in the past. Therefore, we need overall consideration and all-round

arrangement for the whole structure of the school's educational activities so as to allow each educational activity to yield its due effectiveness.

If a school has an appropriate overall structure of activities, its education would be rich, active, and in perfect order. And the students could develop in an all-round way as well as in their own strong points. On the contrary, if the structure is inappropriate, or lopsided, or imbalanced, the school life would be dull, dry, or in disorder, resulting in various bad consequences. So, the overall structure of a school's educational activities is the most important issue of the school.

This article does not focus on providing the overall and detailed argument for this fundamental issue. However, the following are several activities that schools should offer besides teaching activity:

A. Sports activity. This is an indispensable activity of the school. Every student should be involved in physical activity everyday, and at least one hour each day. There is no debate in principle for this regulation. But in fact, since the time for PE and exercises during the break are all counted toward the scheduled "one hour" for physical activity for the day, the activity is very limited and some schools do not provide other extracurricular physical activities. This situation must be changed. We should guarantee one-hour of physical activity for students, not including PE, morning exercises and exercise during the break. Only in this way can we enable students to have sufficient exercises and healthy growth to meet the physical development standard, and to develop the good habit of sports, thus benefitting from it for their whole life.

B. Literary, artistic and recreational activities. This includes music, fine arts, dance, drama, and some literary activities. These kind of activities can enrich students' cultural life, improve their cultural and moral accomplishment and aesthetic judgment, develop their abilities, and build up their health. It can also liven up school life, develop friendships between teachers and students, and among students, and strengthen the ties between schools and the society. If a school lacks these kind of activities, it would be spiritless. However, these kind of activities has not obtained its due "legal" position in the school. There is no regulation which requires schools to offer these kind of activities. But these kind of activities should be arranged everyday, and every student should be involved in them at least one hour each day in order to cultivate some hobbies and to learn some skills such as playing an instrument, calligraphy, or painting.

C. Scientific and technical activities. This is also an indispensable part of a school's educational activities, but many schools do not offer these kind of activities. The main problem is not the lack of facilities, but the lack of administrators' attention and relevant stipulations. We should require each school to offer at least

one or two kinds of scientific and technical activities, two or three times per week, one hour each time. Students can take part in these activities of their own free will.

D. Labor activity. This should take an important position in a school's educational activities. It has been ignored in recent years although it was emphasized in the past. Of course, we have to correct our educational ideology first, then make labor a regular practice and an institutional activity, so as to fulfill the requirement for labor education. Students should take part in labor activity regularly for several hours each week. We can combine the labor activity with the scientific and technical activity, or arrange for the students to take part in these activities in turn for an average of one hour each day.

E. Social activity. This includes the activities provided by the Young Pioneers and the Communist Youth League, such as social investigation, social intercourse, social service, and other social activities. This also includes listening to reports about social problems and attending discussions about social issues. This is an indispensable part of a school's educational activities, but in the past it was at the other end of the extreme; there were too many of these kinds of activities arranged. It would be appropriate for the school to offer such activities once every two weeks for one or two hours each time.

F. Travels and visits. These kind of activities is very important and meaningful for students. It can broaden their horizons and minds, widen their knowledge, inspire their thinking, arouse their strong desire for study, and develop their sense of patriotism. This is one of the best and most active educational activities, and is one of the most favorite activities of the students. However, such a good activity is arranged too few times in many schools, and is not even seen as an educational activity. This is not because of the lack of necessary preconditions, but of the narrow-minded educational ideology. Actually, there are many things and places worth visiting both in the urban and rural areas. So, we should include travels and visits in the plan and the schedule of the school's educational activities, at least once or twice per month; once a week would be better. We should familiarize students with every scene and every major construction, where they live, and let them reach the place as far as they can.

G. Social Work and administrative activity. This includes the work of student unions, of classes, of the Young Pioneers and of the Communist Youth League, and managing classrooms, campuses, library facilities, and public hygene. This also includes editorial work of the wall--newspaper and school magazine, and organizational work for celebrations, exhibitions, and get-togethers. It is very important to develop students' abilities for practical activities, so every student should be given a chance to attend these kind of activities. Some of these activities can be mixed into other activities and, therefore, need no specific time; others that need particular times should be put into the plan and be arranged appropriately.

In short, the seven activities mentioned above are all important parts of a school's educational activities. To students, they are all important learning activities. It would be one-sided and narrow-minded to see them as non-learning activities and to see only classroom-teaching as learning.

The seven activities, plus teaching activity make eight activities. The overall structure of a school's educational activities is composed mainly of these eight activities.

The eight activities are interrelated and overlapping. They make up an organic unit. If they were arranged properly, school education would be perfect, joyful, and very attractive to students. Thus, we cannot only reach our educational goal, but also foster vigorous talents. Otherwise, school education would have some defects no matter which activity is absent. If, for example, there are no other activities but classroom-teaching, it would cause a huge flaw in school education.

Among the eight activities, the major activity is teaching. It takes up the most time when compared with each of the other seven. According to their needs for time, the former four activities need three hours (or three contact hours) per day. The needs of the latter three are about a half day altogether. In this way, we can use one half day for classroom-teaching and the other half for other activities; offering classes in the morning and other activities in the afternoon. This seems to be an ideal overall structure or overall arrangement.

There is often a big gap between the ideal and reality. To build an ideal or good overall structure for a school's educational activities, it is necessary to re-think the whole arrangement of teaching activity. It involves curriculum arrangement, teaching plan, teaching requirements, teaching materials and teaching methods. It is a full-scale educational reform, which is very arduous and complicated. We need quite a long time to research, design and prepare for it. We need to experiment with it first, then popularize it step by step. This is why we have to discuss, study and prepare for it as early as possible.

Achievements of People's Education in China

Cao Qingyang

The Chinese nation, which created a splendid national culture in ancient civilization, has a fine tradition in education. The Chinese Communist Party carries forward this fine tradition of the nation. During the revolutionary period, the Party Central Committee regarded the culture and education as indispensable to the revolutionary struggle, and developed education actively in its base areas. It was because the Chinese Communist Party (CCP) trained hundreds of thousands of revolutionary cadres who commanded millions of the People's Liberation Army men and relied on the broad masses of the people that it was able to seize the state power and established the People's Republic of China.

Since the founding of the PRC, the CCP and the government have taken vigorous actions to expand and reform the people's educational system, while carrying forward the socialist revolution and economic construction. Thirty-five years is like an instance to a country with an ancient civilization of five thousand years. But in these thirty-five years, the New China has achieved in its economic construction, social development and education tremendous successes that are incomparable to any stages in China's history.

A. A Workforce of 16 Million Post-Polytechnic School Graduates Has Been Produced

The pre-revolutionary China trained very few qualified personnel. Within thirty-six years before the founding of the PRC, China had trained 210,000 college graduates and about 10,000 scholars and experts were educated in Europe, America and Japan. The first, and foremost, important task in developing and reforming the people's education was to make great efforts to train qualified scientists and technicians, administrators, and cadres with socialist consciousness and modern scientific knowledge. Based on the education in the earlier liberated area, we properly took over the old schools which had been controlled by the National Party regained the education sovereignty which had been seized by the imperialists. We borrowed experiences from the Soviet Union, and devoted major efforts to developing and reforming our educational system. To meet the needs of the planned development of the national economy, we have not only expanded and reformed the institutions of higher education and secondary technical and vocational schools, but also founded many new ones. The leaders of the Party and the central government, such as Mao Zedong, Liu Shaoqi, Zhou Enlai, were all concerned with the reform and construction of the educational undertakings. From 1949 to 1983, the number of higher education institutions increased from 205 to 805. In 1983 there were 37,000 graduate students and 1,206,800 undergraduate students in China. This is ten times the number of undergraduate students in 1949. Also in 1983, there were 3,090 secondary technical schools with 1,143,300 students. The student number increased by 500% from 1949 to 1983. The

total number of post-secondary graduates was 4,110,000--20.5 times as many as those trained in the Old China before liberation. During the same period (1949-83), the total number of post graduates was 41,800, and that of students studying abroad was 34,000. Moreover, the total number of secondary technical school graduates was 7,224,000. If we add the number of graduates of various types of adult higher education institutions, such as night universities, correspondence colleges, broadcast and TV universities, as well as those from part-time secondary technical schools, the total number would be 16,000,000. It is those people who have composed the "Red and Expert" rank of the proletarian intellectuals, and become the basis of the educated force in realizing the socialist modernization.

B. The Quality of the Chinese Nation Has Been Enhanced and the Culture and Scientific Levels of the Working People Have Been Raised

Since the founding of the P.R.C., the general education in our country has expanded significantly. There are 380,000,000 children who have received elementary education; 150,000,000 young adults who have been taught to read and write. According to the statistics of 1983, there were 96,500 ordinary secondary schools with 43,977,300 students (42.5 times that in 1949); 862,200 elementary schools with 135,780,000 students (5.5 times that in 1949). The proportion of school-age children enrolled in school increased from 20% in 1949 to 94% in 1983. Elementary education has been popularized in about a quarter of the counties in our country. In some of the big and medium-sized cities and costal areas where economy has developed considerably, the junior middle school has been almost popularized. From 1949 to 1983, the total number of elementary school graduates was 386,480,000, of which 251,430,000 received junior middle school education.

In order to develop children's intelligence as early as possible, the pre-school education in our country has expanded rapidly. According to the statistics of 1983, there were 136,300 preschool institutions (including independent classes) with 11,400,000 children (more than 80 times that in 1950).

Since the founding of the P.R.C., the CCP and the government have devoted much attention to the education of the minority nationalities. When the higher education institutions admit new students, the policy is implemented according to which the minority students are given priority for admissions when their scores on the entrance exam are the same as the others. Meanwhile, both higher education institutions and secondary technical schools have also been founded in minority-nationality regions. In Xinjiang Uygur Autonomous Region alone, there are 14 new colleges and universities; and 104 secondary technical schools have been newly established. In 1982, there were 53,700 minority students in the institutions of higher education (41 times that in 1950). The rate of increase of the national minority students in the institutions of higher education exceeded the national average. The number of minority students was 75,700 in the secondary technical schools and 1,800,000 in

the secondary vocational schools. The accumulated number of the over-seas Chinese students in various levels of schools has reached 150,000 since 1949.

At present, there are 319 special schools for blind and deaf-mute children, with a total of 35,700 students.

C. A Vocational Education and Adult Education Network is Taking Shape

China's vocational education achieved significant development since President Liu Shaoqi promoted Work-Study Schools in 1957, and established "dual educational systems and dual labor systems" in 1958. Up to 1965, the enrollment of secondary agricultural and technical schools reached 4,433,000. However, almost all of this kind of schools were suspended during the "Cultural Revolution." Since 1978, as a result of Deng Xiaoping's promoting the "expansion of vocational and technical schools," the vocational education has been in a period of steady development and the unitary structure of secondary education has been changed to some extent. Up to 1983, the total number of agricultural and vocational schools was 5,481 with 1,220,100 students (4,073 of which were agricultural schools with 681,500 students). According to the statistics of 18 provinces, approximately 400 special subject areas and types of work in production have been offered in the vocational schools. Vocational education in Liaoning, Shandong, and Jiangsu provinces has developed more rapidly than that in the other provinces and municipalities. There are 228 agricultural technical schools in Shandong Province, averaging at least 2 in each county. Pre-employment vocational training systems are taking shape in Shuzhou City, Jiangsu Province.

The adult education has expanded considerably. In 1983, there were 1,196 various kinds of adult higher education institutions in China. Furthermore, there were 155 general colleges and universities offering correspondence course, 169 offering evening universities, and another 54 offering both correspondence and evening programs.

The total number of students enrolled in the institutions of adult higher education is 1,128,400. Since 1981, 259,174 students have taken self-study examinations, of whom 113,800 earned certification of single subjects. Within these four years, 160,000 students graduated from the Central TV University, and 200,000 completed a single course.

D. Scientific Research Achievements of Higher Education Institutions Have Been Attained

The institutions of higher education have made great contributions to researches in natural sciences. Fifty-six out of 122 natural-science research prizes were awarded to colleges and universities by the state Science Commission in July, 1982. In terms of the national invention prize which was re-established in 1978, 170 out of 642 prizes were awarded to the institutions of higher education up to 1983. The institutions affiliated to the Ministry of Education (now the State

Educational Commission) conduct each year 3,000-4,000 research projects (more than 300 projects are evaluated each year) which have an economic benefit of about five hundred million yuan. Among them, 50-60% have reached the national advanced level, 10-20% filled the gaps in the field at home, and 20% reached the international advanced level.

Social-science researches in the institutions of higher education are an important force in social studies in China. There are more than 60,000 faculty members in social sciences, more than 4,000 full-time research staff, about 130 research institutions, 300 research group teams), 208 academic journals, and 50 scholarly publications in the institutions of higher education. According to the statistics in 1982, there were about 14,000 research papers published in the university journals. Recently, research on sociology and population has been resumed and developed in colleges and universities.

E. Schools Have Play an Important Role in the Development of Spiritual Civilization

Political education is emphasized at various levels of schools in training the new generations with Marxism-Lennism-Mao Zedong Though and communist morality. After the Third Plenary Session of the Eleventh Party Central Committee in 1978, the Ministry of Education issued "The Regulations for College Students," "The Regulations for Middle School Students," and "The Regulations for Primary School Students." These regulations set basic requirements for students' development of ideology and moral character.

F. International Academic Exchanges Have Been Widely Promoted

By 1965, tens of thousands of students and scholars had been sent abroad; 9,106 of them were sent to the Soviet Union. Since 1978, 18,500 have been sent by the Chinese government to 54 countries in five continents; 7,000 of them have completed their study and returned. At present, about 7,000 students are studying abroad at their own expense. Meanwhile, we have received a large number of foreign students as well. For instance, about 5,000 foreign students who came from more than 100 countries in five continents studied in our country in 1983. In addition, about 120 Chinese teachers have been invited by 28 foreign countries to teach in colleges and universities, mainly teaching Chinese. Also, many scholars and teachers have been invited to go abroad for short lecture tours. Faculty members of China's colleges and universities attended various international academic conferences in recent years; 839 of them attended 370 conferences during 1979-82. In addition, 106 colleges and universities (mainly key universities) have established various inter-university relationships with 151 relevant foreign universities.

G. A Great Number of Teaching Materials have been Compiled and Published

Since 1949 we have compiled and published six sets of textbooks for elementary and secondary schools. In the first five sets, 63 teaching syllabi, 326 textbooks, and 277 teachers' manuals were compiled and published. The sixth set which began to be compiled in 1982 contains textbooks for the six-year key secondary schools.

For liberal arts in higher education, 187 volumes in 73 titles of textbooks and reference books were compiled from 1961 to 1966. Since 1978, 430 teaching material projects in four batches are being carried out, 70% of them have been completed.

Teaching materials on sciences, engineering, agriculture and medicine were mainly borrowed from the Soviet Union in the early 1950s and partly compiled by China's universities themselves. From 1958 to June 1966, an undertaking of compiling teaching materials by the Chinese themselves was taken up in full scale. In 1961, 360 out of 530 academic fields in the institutions of higher education compiled their unified teaching materials; 300 out of 340 specialized subjects in secondary vocational schools compiled their unified textbooks. Since 1977, the total number of textbooks and reference books on science, engineering, agriculture and medicine is 2,881 (including 682 titles for secondary vocational schools, and 50 titles for technical schools). They have been compiled and published by 30 ministries and commissions and 34 publishing houses. These teaching materials have met the basic needs of teaching.

H. A Contingent of "Red and Expert" Teaching and Administrative Staff has been Established

A contingent of "Red and Expert" teachers, cadres and administrators has been established at various levels of schools since 1949. According to the statistics of 1983, there were 11,474,000 staff members at all levels of schools (from kindergarten to university), accounting for 10 percent of the total number of staff and workers of the whole country. Among them, 8,994,300 are full-time teachers. Up to 1983, of 302,900 faculty members in the institutions of higher education, 5,282 were full-professors, 31,782 were associate professors, and 149,987 were lecturers. The total number of 187,051 was five times that in 1965 (37,088). The quality of teachers in elementary and secondary schools has improved through reorganizing and training. The ratio of locally-supported teachers decreased. Compared with those in 1979, locally-supported teachers in secondary schools decreased from 35.8% to 19.8% in 1982, and those in elementary schools from 63.8% to 54.2%. Teacher education was expanded while in-service training courses were conducted to enhance the qualifications of teachers. In 1983, there were 197 higher normal colleges and universities and 861 normal schools. In addition to teachers' academic training, the ideological and

political work among them has been emphasized so as to enable teachers to act as fine models for their students. As a result, many outstanding teachers have emerged.

I. Facilities are Improved

Since LIberation, governments at all levels have built and renovated a great number of school buildings, and purchases various kinds of teaching equipment, facilities and books. The government has allocated huge funds to rebuild schools that were destroyed during the "Cultural Revolution." Education funds have increased every year since 1977. Between 1979 and 1981, the proportion of education funds in the national expenditure increased from 9.65% to 13.3%, while the percentage of investment in the basic construction for education purposes in the total state investment in basic construction increased from 1% to 3%. Central ministries and local governments allocate about a hundred million yuan each year to build and renovate school buildings and to purchase equipment and facilities. From 1950 to 1983, the total amount of education funds allocated by the government is 135,000 million yuan (12,700 million yuan in 1983). Quite a large proportion of the education funds come from factories and enterprises, rural economic organizations, overseas Chinese, and other individuals. The organization and equipment of audio-visual education have developed greatly since 1978. Now we have 15,000 full-time and 28,000 part-time audio-visual education staff members. By September, 1982, there were about 200,000 slide projectors, 200,000 tape recorders, 70,000 record players, nearly 20,000 film projectors, hundreds of video-cameras, thousands of video-recorders, and many language laboratories and audio-visual classrooms in schools at all levels. Computer teaching has started to be offered in some schools. To promote the construction of 500 key subjects in key universities, 200 million American dollars of loans from the World Bank have been allocated to key universities for purchases of advanced equipment from abroad, inviting foreign experts to give lectures, and sending teachers abroad to pursue advanced studies.

In addition to the achievements mentioned above, there is another important achievement; that is, we have accumulated a wealth of experiences through the long-term practice of socialist education. We have achieved successes in many aspects, but we have also learned lessons from the failures in certain aspects during certain periods. For example, on the relationship between education and economic development, we have the experience in coordinating education development with the nation's economic planning, but we have also learned lessons in which we had partially emphasized material production and neglected intellectual development. On the relationship between being "Red" and being "Expert," and the relationship between political and academic work, we have the successful experience in training talents who develop in an all-round way--morally, intellectually and physically. We have made both "leftist" mistakes (such as overemphasis on politics, or even worse, using politics instead of scientific research and

instruction); and "rightist" mistakes (such as underestimating the role of politics). On the relationship between the leadership of the Party and the role of the intellectual, we have experience in emphasis put on mobilizing the enthusiasm of the intellectual and setting reliance on them in running schools, while we have made some "left" mistake (such as strengthening the leadership of the Party against setting reliance on the active role of the intellectual). On the relationship of carrying on and criticizing the cultural heritage, we have successful experience of critically carrying on cultural heritage based on the guideline of the Marxism-Leninism-Mao Zedong Thought and the policy of "making the past serve the present and foreign things serve China", while we have made a mistake of overemphasis on criticism without inheritance. On the structure of the higher education, we gained some achievement in expanding education in science and technology to coordinate plans of industrialization, but we made serious mistakes by ignoring social science as well as literal arts, law, business management, and economics, mistakes which resulted in the lopsided development of the structure of the higher education. During the 10-year turmoil of the "Cultural Revolution," we suffered a lot and we were 100 thousand graduate students, 1 million undergraduate, and 2 million second technique school students short which we should have trained. As a result, there has been a temporary shortage of talent.

Since the Third Plenary Session of the Eleventh Party Central Committee, Chinese education has been led onto the correct path. Deng Xiaoping (September 1983) further pointed out the prospects for China's education: "Education should be geared to the needs of the modernization, to the world and to the future." In order to meet these needs, it is necessary to have educational reforms run through the whole process of the socialist modernization.

At the higher education level, educational reforms should take place both in the structure and the internal administration system; the quality of instruction and the academic level should be improved in order to meet the needs of modernization. Some new subjects should be established and some shortage subjects such as economics, politics, management and applied liberal arts should be developed in order to meet the needs of the country. The inappropriate ratio between the 4-year college and 2-year college should be changed and major efforts should be devoted to the development of the 2-3 year colleges and technical schools. The instructional materials and methods and the instructional system should be improved in order to develop students' ability. The enrollment system and job assignment system should also be reformed progressively.

At the level of universal education, we have to correct our guiding principle for running the school, oppose the tendency towards concentrating only on getting higher proportion of students to enter the institutions of higher education. The reforms in the secondary education system should be speeded up and the vocational education should be developed vigorously. The goal of producing for society the

laborers with higher standards in political ideology, intelligence, and technical knowledge should be given the first priority. The combination of education and physical labor should be insisted on and the work-study program should be developed vigorously. The reforms in learning and instruction should be furthered and the empirical research system in kindergartens and elementary schools up to secondary schools should be established so that the follow-up surveys of the students can be conducted. The administrative system in the universal system also needs to be reformed in order to speed up the development of education on the basis of enthusiasm of all circles of the society for the running of schools.

Education in rural areas should be expanded and reformed. Rural education should be oriented to the rural realities and to serve the agricultural modernization.

In order to speed up the educational development and reform in China, we must pay more attention to:

1. emphasizing the important role of education in modernization;
2. insisting on the socialist orientation of education;
3. insisting on the principle of "walking on two legs" (which means that at various educational levels, popularization should go hand-in-hand with improvement in the quality of education; and while developing a few key schools, great efforts should be made to do a good job in running the regular schools.
4. implementing the Party's policy on intellectuals, strengthening in-service training for teachers at various levels of schools, and expanding teacher education;
5. insisting on and improving the leadership of the Party in education.

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